

## **Depreciation Concepts**

### **Public Utility Depreciation**

From a regulator's perspective, the objective of public utility depreciation is straight-line capital recovery. This is accomplished by allocating the original cost of assets to expense over the lives of those assets through the application of depreciation rates to plant balances.

There are several unique factors driving public utility depreciation rates. First, public utility depreciation is based on a "group life" as opposed to the lives of individual assets. Second, the cost of removing or disposing of an asset that is retired from service is charged to the accumulated depreciation reserve, as opposed to being recognized as an operating expense in the year incurred. Third, the original cost of a retired asset is also recorded in the accumulated depreciation reserve, as opposed to being written off in the year of the asset's retirement/disposal. Fourth, in certain jurisdictions public utility depreciation rates incorporate net salvage factors as discussed above. This is not the case for unregulated entities. Each of these factors affects the depreciation rates that are ultimately determined for the group of assets that are recorded in plant accounts designated by the FERC Uniform System of Accounts ("USOA").

Depreciation expense is one of the primary cost drivers of public utility revenue requirement calculations because these companies are capital intensive. An excessive depreciation rate can unreasonably increase the utility's

revenue requirement and resulting service rates; thereby unnecessarily charging millions of dollars to a utility's customers.

Depreciation is a legitimate expense, but it is a major expense based on a substantial amount of judgment and complex analytical procedures, and it drives utility prices. Therefore, the measurement of depreciation and the calculation of the expense warrant careful regulatory consideration and scrutiny.

I discuss the fundamentals of public utility depreciation below, including the difference between the whole-life and remaining life techniques and the impact of life and net salvage estimation on depreciation rates.

### **Plant Additions, Retirements and Balances**

Public utilities record their plant investment activity in the individual plant accounts set-forth in the Federal Energy Regulatory Commission's ("FERC") Uniform System of Accounts ("USOA"). Additions, retirements and balances refer to individual plant accounts. For example, account 331-Structures and Improvements, is a plant account. An annual addition is the original cost of plant added to the account during the year. An annual retirement is the original cost of a prior addition which is now removed from service. The plant balance is what is left.

### **Depreciation Expense**

Depreciation expense is a charge to operating expense to reflect the recovery of the cost of an asset. Public utility depreciation expense is typically

straight-line over service life, which results in an equal share of the cost of assets being assigned or allocated to expense each year over the service life of the assets. A service life is the period of time during which depreciable plant [and equipment] is in service.<sup>1</sup> Annual depreciation expense is a cost included in a public utility's revenue requirement.

Annual depreciation expense is calculated by applying a depreciation rate to plant balances. The resulting expense (also called accrual) is charged, just as any other expense, to the revenue requirement and from there it is charged to the utility's customers.

Depreciation is a non-cash expense in contrast to payroll expense, for example, which involves the current outlay of cash. That is, depreciation expense does not involve a specific payment during the current or test-year. Both depreciation and payroll are included as expenses in the income statement and revenue requirement, but no cash flows out of the company for depreciation expense. Instead of reducing the cash account, depreciation expense is recorded on the income statement as an expense and simultaneously recorded on the balance sheet in the accumulated depreciation account; which is shown as an offset to plant in service.

Accumulated depreciation (hereinafter called reserve or accumulated depreciation) is, in essence, a record of the previously recorded depreciation expense. At any point in time, the accumulated depreciation account represents the net accumulated amount of the original cost of assets and net salvage that

---

<sup>1</sup> Public Utility Depreciation Practices, August, 1996. National Association of Regulatory Utility Commissioners ("NARUC Manual"), p. 321.

has been recovered to date. It can be considered a measure of the depreciation recovered from ratepayers.

### **Depreciation Rates**

Depreciation rates such as SCE's are founded upon three fundamental parameters: a service life, a dispersion pattern and a net salvage ratio. SCE has used the remaining life technique to compute its rates. In order to understand remaining life depreciation, it is useful to first address whole-life depreciation.

### **Whole-Life Technique**

The following calculation shows a straight-line whole-life depreciation rate assuming a 10-year average service life. This example does not include net salvage.

#### **Table 1**

#### **Straight-Line Whole-Life Depreciation Rate Assuming 10-Year Life**

$$\frac{100\%}{10 \text{ yrs.}} = 10.0\%$$

Each year the 10.0 percent depreciation rate would be applied to plant in service to produce an annual depreciation expense. All things equal, at the end of 10 years, the plant balance will be 100%, and the depreciation reserve balance will be 100%. This equality is important to an understanding of certain issues in this case.

Some utilities, such as SCE, include net salvage in the depreciation rate calculation. A central issue in this case is negative net salvage. I will, therefore, use negative net salvage in my example. Negative net salvage is the net cost of removal of the asset after completion of its service life. For the remainder of this discussion I use the terms negative net salvage, decommissioning and cost of removal interchangeably. Assuming a negative 5 percent (-5%) net salvage ratio, the equation above with a value for negative net salvage is as follows:

**Table 2**

**Straight-Line Whole-Life Depreciation Rate  
Assuming 10-Year Life and -5% Net Salvage**

$$\frac{100\% - (-5\%)}{10 \text{ yrs.}} = 10.5\%$$

Negative net salvage increases the resulting whole-life depreciation rate from 10.0% to 10.5%. This happens because negative salvage is, in effect, added to the original cost of the plant. Instead of 100% (which represents the original cost of assets), the numerator becomes 105%. This is equivalent to capitalizing or adding the estimated cost of removal to the original cost of the asset.

At the end of life under this scenario the plant balance will be 100% but the reserve will be 105%. In other words, unlike the "zero net salvage scenario" in Table 1; when negative net salvage is included in a depreciation rate there will not be an equality of plant and reserve at the end of an asset's life because the Company will have charged more depreciation than it paid for the original cost of the asset.

Under these circumstances, equality will only be achieved if the Company actually spends the additional money at the end of the asset's life. However, unless the Company has a legal liability to remove the asset, it is not required to spend the money. Furthermore, since accumulated depreciation is an "unfunded account", even though the Company collected unnecessary cost of removal amounts in the past, it will have already spent that money on whatever it chose: salaries, dividends, etc.

### **Remaining Life Technique**

The remaining life technique is similar to the whole-life technique, but it incorporates accumulated depreciation into the numerator of the equation, and the denominator becomes the remaining life rather than the whole life of the asset.

If the hypothetical 10-year asset discussed above is 3 years old, its remaining life would be 7 years ( $10 - 3 = 7$ ). The accumulated depreciation account would be 31.5 percent of the original cost because the 10.5 percent depreciation rate from Table 2 would have been applied for three years ( $3 \times 10.5\% = 31.5\%$ ). The remaining life depreciation rate would then be calculated as follows:

#### **Table 3**

#### **Straight-Line Remaining Depreciation Life Rate Assuming 10-year Life, 7-year Remaining Life And -5% Net Salvage**

$$\frac{100\% - (-5\%) - 31.5\%}{7 \text{ years}} = 10.5\%$$

In the examples shown in Tables 2 and 3, the remaining life depreciation rate and the whole-life depreciation rates are the same (10.5 percent), because I have assumed that the accumulated depreciation account is in balance. In other words, based on a continuation of the fundamental parameters, i.e., the 10-year service life and the negative 5 percent net salvage ratio, exactly the right amount of depreciation (31.5 percent) has been charged and collected in the past,

If either the service life or net salvage parameter changes during the life of the plant, the accumulated depreciation account will be out of balance, and the remaining life rate will be either higher or lower than whole-life rate depending on the direction of the imbalance. That is because the Company will have collected either too much depreciation or not enough depreciation in the past, given the current estimates of lives or future net salvage.

The difference between the actual amount recovered, as included in the book depreciation reserve, and a theoretical estimate of what should be in the book reserve, is called a "reserve imbalance." The remaining life technique is often used to deal with such reserve imbalances.

The remaining life technique has been accepted and used in many jurisdictions. Its primary failing is that if there is a reserve imbalance, positive or negative, it results in the application of an incorrect rate to new plant additions. In other words, the remaining life technique perpetuates the same imbalances it attempts to cure. This problem can be resolved by using whole-life rates and separate treatment for any reserve imbalances.

### **Impact of Life and Net Salvage Estimation**

Utilities own thousands of assets, represented by millions of dollars of investment. Given the capital intensity of the industry, it is very difficult to track and depreciate every single asset that a utility owns. Public utility depreciation is, therefore, based on a group concept, which relies on averages of the service lives and remaining lives of the assets within a specific group.

These factors are necessarily estimates of the average service lives and average remaining lives of groups of assets. These estimates are in turn based on complex analytical procedures which involve not only the age of existing and retired assets, but also retirement dispersion patterns called "lowa curves." The important point to remember is that service life, average age and lowa curves are all used in the estimation of an average service life and average remaining life of a group of assets and are ultimately used to calculate the depreciation rate for that group of assets.

In depreciation analysis it is axiomatic that the shorter the life, the higher the resulting depreciation rate. If SCE's depreciation rates are based on lives which are too short, the depreciation rates will be too high. What if the 10-year life I used in the earlier examples really should have been 30 years? For example, assume that the analyst conducted statistical analyses which indicated that the average life is actually 30 years. The following table shows the impact of continuing to use a shorter life.

**Table 4**

**Impact of Reducing a Life From 30 Years to 10 Years**

$$30 \text{ year life} = 100\%/30 = 3.3\%$$

$$10 \text{ year life} = 100\%/10 = 10.0\%$$

If the life should have been 30 years, the rate should have been 3.3 percent rather than the 10 percent depreciation rate based on a 10 year life. The shorter the life, the higher the rate. If the life is too short, the resulting rate is obviously excessive.

The estimation of future net salvage also has an impact on depreciation rates. Many of SCE's proposed depreciation rates contain negative net salvage factors which charge too much for future cost of removal because they are too negative. They result in excessive depreciation rates. The next table shows the impact on depreciation rates of increasing the cost of removal ratio.

**Table 5**

**Impact of Increasing Cost of Removal Ratio**

$$-5\% \text{ ratio} = 100 \% - (-5)/30 = 3.5 \%$$

$$-50\% \text{ ratio} = 100 \% - (-50)/30 = 5.0 \%$$

Increasing a cost of removal ratio from -5% to -50% increases the depreciation rate from 3.5% to 5.0%. If the estimated -50% cost of removal ratio is not supportable, obviously, the resulting 5.0% depreciation rate is excessive. The combination of these two factors, i.e., understated lives and overstated cost of removal ratios, compounds the excessive depreciation rate problem.

# **Union Light, Heat and Power Company**

## **205 - Structures and Improvements**

**KyPSC Staff Second Set Data Requests  
ULH&P Case No. 2005-00042  
Date Received: April 5, 2005  
Response Due Date: April 19, 2005**

**KyPSC-DR-02-012**

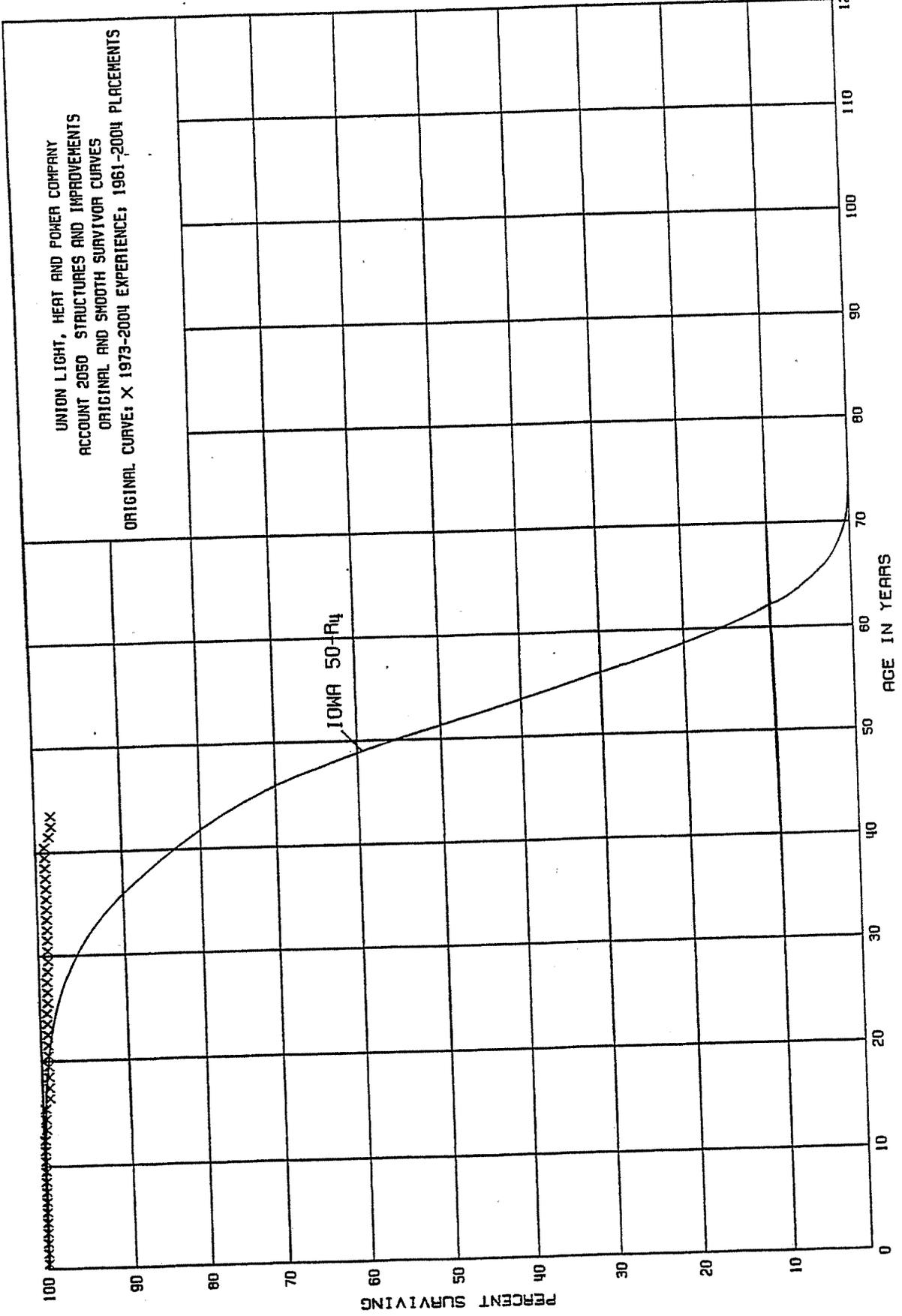
**REQUEST:**

12. Refer to the Application, Tab 34, page III-13. Concerning Account 2050, Structures and Improvements, the Iowa curve 50-R4 shifts inward while the plotted data points reflect essentially a straight line.
  - a. Explain why ULH&P considers the Iowa curve 50-R4 to be the best match for this account.
  - b. Indicate whether an Iowa curve that provides a better match for this account exists and provide a copy of that curve.

**RESPONSE:**

- a. The original survivor curve for Account 2050 does not have an Iowa curve that will reasonably match the points statistically. The 50-R4 Iowa curve was selected as the most reasonable estimate given the nature of the assets, the past estimate for this account, and the estimates by other utilities for similar assets. The 50-R4 was determined by judgment.
- b. There is no Iowa curve that provides a better match statistically because the points basically are a straight line.

**WITNESS RESPONSIBLE:** John J. Spanos

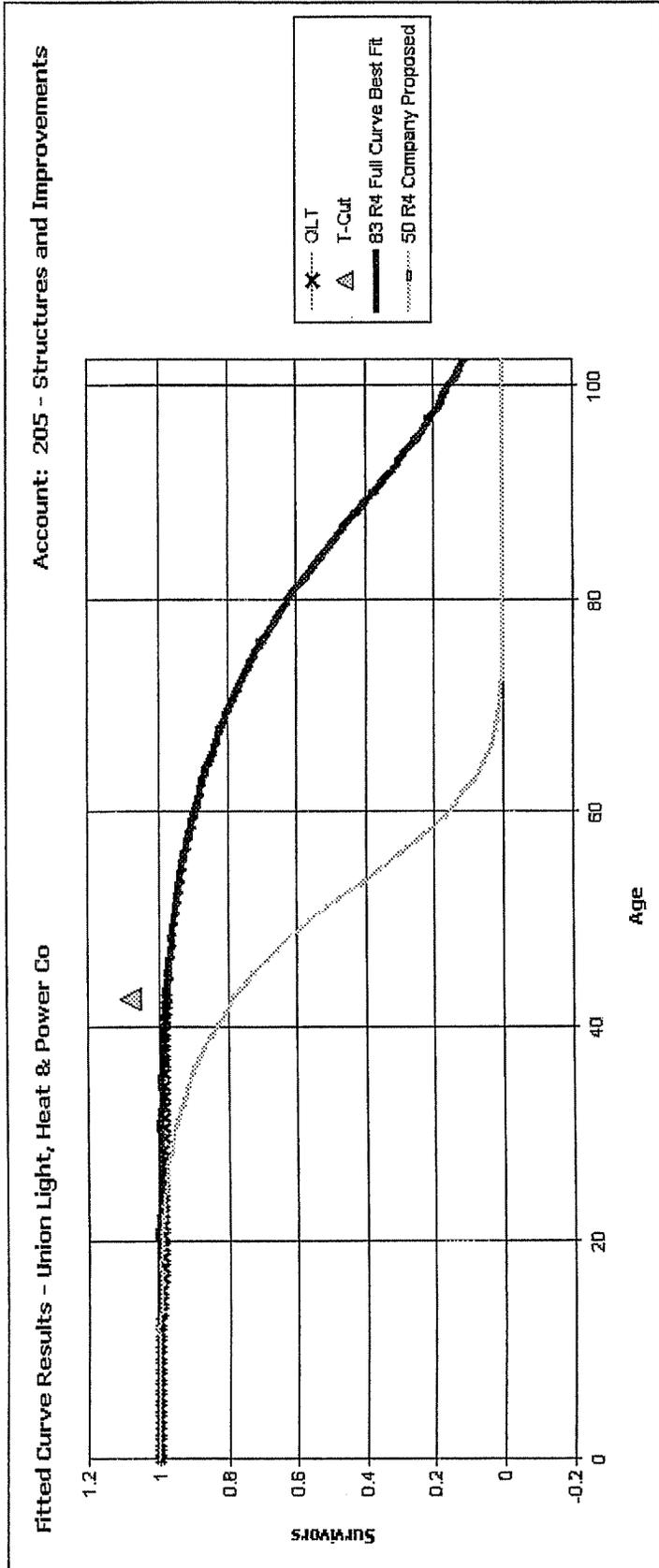


**Best Fit Curve Results**  
**Union Light, Heat and Power Company**  
**Account: 205 - Structures and Improvements**

Curve	Life	Sum of Squared Differences
<b>BAND</b>	<b>1973 - 2004</b>	
R4	83.0	7.897
L3	100.0	8.846
S2	100.0	11.940
S3	82.0	12.938
L4	76.0	14.963
R5	61.0	17.925
S4	64.0	17.963
L5	62.0	19.800
S5	55.0	21.491
S6	50.0	24.155
R3	100.0	26.569
SQ	43.0	31.959
S1.5	100.0	73.910
L2	100.0	125.901
R2.5	100.0	170.624
S1	100.0	232.126
R2	100.0	455.551
L1.5	100.0	515.171
S0.5	100.0	691.078
R1.5	100.0	1,120.721
L1	100.0	1,188.965
R1	100.0	2,088.603
L0.5	100.0	2,528.267
S-0.5	100.0	3,197.735
R0.5	100.0	3,694.089
L0	100.0	4,410.907
O1	100.0	5,759.854
O2	100.0	7,393.884
O3	100.0	15,521.233
O4	100.0	27,894.886
S0	1.0	434,145.722

**Analytical Parameters**

OLT Placement Band: 1961 - 2004  
 OLT Experience Band: 1973 - 2004  
 Minimum Life Parameter: 1  
 Maximum Life Parameter: 100  
 Life Increment Parameter: 1  
 Max Age (T-Cut): 42.5



**Analytical Parameters**

OLT Placement Band: 1961 - 2004  
 OLT Experience Band: 1973 - 2004  
 Minimum Life Parameter: 1  
 Maximum Life Parameter: 100  
 Life Increment Parameter: 1  
 Max Age (T-Cut): 42.5

**Observed Life Table Results**  
**Union Light, Heat and Power Company**  
**Account: 205 - Structures and Improvements**

Age	Exposures	Retiremen	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
<b>BAND</b>		<b>1961 - 2004</b>			
0	1,576,534	0	0.0000	100.0000	1.0000
0.5	1,458,342	0	0.0000	100.0000	1.0000
1.5	1,458,342	0	0.0000	100.0000	1.0000
2.5	1,406,852	0	0.0000	100.0000	1.0000
3.5	1,406,852	0	0.0000	100.0000	1.0000
4.5	1,380,385	0	0.0000	100.0000	1.0000
5.5	1,369,178	0	0.0000	100.0000	1.0000
6.5	1,367,768	0	0.0000	100.0000	1.0000
7.5	1,367,768	0	0.0000	100.0000	1.0000
8.5	1,367,768	0	0.0000	100.0000	1.0000
9.5	1,367,768	0	0.0000	100.0000	1.0000
10.5	1,367,768	0	0.0000	100.0000	1.0000
11.5	1,367,768	610	0.0446	99.9554	1.0000
12.5	1,367,158	3,739	0.2735	99.7265	0.9996
13.5	1,360,096	0	0.0000	100.0000	0.9968
14.5	1,311,084	0	0.0000	100.0000	0.9968
15.5	1,309,757	6,368	0.4862	99.5138	0.9968
16.5	1,303,389	0	0.0000	100.0000	0.9920
17.5	1,303,389	368	0.0282	99.9718	0.9920
18.5	1,296,792	0	0.0000	100.0000	0.9917
19.5	1,296,792	0	0.0000	100.0000	0.9917
20.5	1,296,792	0	0.0000	100.0000	0.9917
21.5	1,296,792	0	0.0000	100.0000	0.9917
22.5	1,296,792	0	0.0000	100.0000	0.9917
23.5	1,296,412	0	0.0000	100.0000	0.9917
24.5	1,296,412	1,479	0.1141	99.8859	0.9917
25.5	1,291,361	0	0.0000	100.0000	0.9906
26.5	1,291,361	0	0.0000	100.0000	0.9906
27.5	1,275,699	524	0.0411	99.9589	0.9906
28.5	1,275,175	1,958	0.1536	99.8464	0.9902
29.5	1,271,490	0	0.0000	100.0000	0.9886
30.5	1,266,810	0	0.0000	100.0000	0.9886
31.5	1,258,620	0	0.0000	100.0000	0.9886
32.5	1,251,978	0	0.0000	100.0000	0.9886
33.5	1,228,315	0	0.0000	100.0000	0.9886
34.5	1,217,879	0	0.0000	100.0000	0.9886
35.5	1,217,879	0	0.0000	100.0000	0.9886
36.5	1,217,879	0	0.0000	100.0000	0.9886
37.5	1,217,879	0	0.0000	100.0000	0.9886
38.5	1,217,879	0	0.0000	100.0000	0.9886
39.5	1,217,879	0	0.0000	100.0000	0.9886
40.5	1,217,879	5,862	0.4813	99.5187	0.9886
41.5	1,210,276	4,143	0.3423	99.6577	0.9839
42.5	1,206,133	0	0.0000	100.0000	0.9805

**Observed Life Table Results**  
**Union Light, Heat and Power Company**  
**Account: 205 - Structures and Improvements**

Age	Exposures	Retirement	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
<b>BAND</b>		<b>1973 - 2004</b>			
0	315,781	0	0.0000	100.0000	1.0000
0.5	204,232	0	0.0000	100.0000	1.0000
1.5	227,896	0	0.0000	100.0000	1.0000
2.5	183,744	0	0.0000	100.0000	1.0000
3.5	183,744	0	0.0000	100.0000	1.0000
4.5	157,277	0	0.0000	100.0000	1.0000
5.5	146,070	0	0.0000	100.0000	1.0000
6.5	144,660	0	0.0000	100.0000	1.0000
7.5	144,660	0	0.0000	100.0000	1.0000
8.5	144,660	0	0.0000	100.0000	1.0000
9.5	146,769	0	0.0000	100.0000	1.0000
10.5	146,769	0	0.0000	100.0000	1.0000
11.5	1,367,768	610	0.0446	99.9554	1.0000
12.5	1,367,158	3,739	0.2735	99.7265	0.9996
13.5	1,360,096	0	0.0000	100.0000	0.9968
14.5	1,311,084	0	0.0000	100.0000	0.9968
15.5	1,309,757	6,368	0.4862	99.5138	0.9968
16.5	1,303,389	0	0.0000	100.0000	0.9920
17.5	1,303,389	368	0.0282	99.9718	0.9920
18.5	1,296,792	0	0.0000	100.0000	0.9917
19.5	1,296,792	0	0.0000	100.0000	0.9917
20.5	1,296,792	0	0.0000	100.0000	0.9917
21.5	1,296,792	0	0.0000	100.0000	0.9917
22.5	1,296,792	0	0.0000	100.0000	0.9917
23.5	1,296,412	0	0.0000	100.0000	0.9917
24.5	1,296,412	1,479	0.1141	99.8859	0.9917
25.5	1,291,361	0	0.0000	100.0000	0.9906
26.5	1,291,361	0	0.0000	100.0000	0.9906
27.5	1,275,699	524	0.0411	99.9589	0.9906
28.5	1,275,175	1,958	0.1536	99.8464	0.9902
29.5	1,271,490	0	0.0000	100.0000	0.9886
30.5	1,266,810	0	0.0000	100.0000	0.9886
31.5	1,258,620	0	0.0000	100.0000	0.9886
32.5	1,251,978	0	0.0000	100.0000	0.9886
33.5	1,228,315	0	0.0000	100.0000	0.9886
34.5	1,217,879	0	0.0000	100.0000	0.9886
35.5	1,217,879	0	0.0000	100.0000	0.9886
36.5	1,217,879	0	0.0000	100.0000	0.9886
37.5	1,217,879	0	0.0000	100.0000	0.9886
38.5	1,217,879	0	0.0000	100.0000	0.9886
39.5	1,217,879	0	0.0000	100.0000	0.9886
40.5	1,217,879	5,862	0.4813	99.5187	0.9886
41.5	1,210,276	4,143	0.3423	99.6577	0.9839
42.5	1,206,133	0	0.0000	100.0000	0.9805

Union Light, Heat and Power Co.

205 - Structures and Improvements

Calculation of Remaining Life  
Based Upon Broad Group/Vintage Group Life Group Procedures  
Related to Original Cost as of December 31, 2004

Survivor Curve .. IOWA:

83

R4

Year (1)	Age (2)	Surviving Investment (3)	ELG Average		ASL Weights (6)=(3)/(4)	RL Weights (7)=(6)*(5)
			Service Life (4)	Remaining Life (5)		
2004	0.5	118,191	77.94	77.44	1,516	117,433
2003	1.5	0	78.01	76.51	0	0
2002	2.5	51,490	78.05	75.55	660	49,841
2001	3.5	0	78.08	74.58	0	0
2000	4.5	26,467	78.11	73.61	339	24,942
1999	5.5	11,207	78.13	72.63	143	10,418
1998	6.5	4,507	78.16	71.66	58	4,132
1997	7.5	0	78.18	70.68	0	0
1996	8.5	0	78.21	69.71	0	0
1995	9.5	0	78.23	68.73	0	0
1994	10.5	0	78.26	67.76	0	0
1993	11.5	0	78.29	66.79	0	0
1992	12.5	0	78.31	65.81	0	0
1991	13.5	3,324	78.35	64.85	42	2,751
1990	14.5	49,012	78.38	63.88	625	39,945
1989	15.5	1,326	78.41	62.91	17	1,064
1988	16.5	0	78.45	61.95	0	0
1987	17.5	0	78.49	60.99	0	0
1986	18.5	6,229	78.53	60.03	79	4,762
1985	19.5	0	78.57	59.07	0	0
1984	20.5	0	78.62	58.12	0	0
1983	21.5	0	78.67	57.17	0	0
1982	22.5	0	78.72	56.22	0	0
1981	23.5	380	78.78	55.28	5	267
1980	24.5	0	78.84	54.34	0	0
1979	25.5	3,573	78.90	53.40	45	2,418
1978	26.5	0	78.97	52.47	0	0
1977	27.5	15,662	79.04	51.54	198	10,213
1976	28.5	0	79.12	50.62	0	0
1975	29.5	1,727	79.20	49.70	22	1,084
1974	30.5	4,680	79.28	48.78	59	2,880
1973	31.5	8,189	79.37	47.87	103	4,939
1972	32.5	6,643	79.47	46.97	84	3,926
1971	33.5	23,663	79.57	46.07	297	13,701

Union Light, Heat and Power Co.

205 - Structures and Improvements

Calculation of Remaining Life  
Based Upon Broad Group/Vintage Group Life Group Procedures  
Related to Original Cost as of December 31, 2004

Survivor Curve .. IOWA:

83

R4

<u>Year</u> (1)	<u>Age</u> (2)	<u>Surviving Investment</u> (3)	<u>ELG Average</u>		<u>ASL Weights</u> (6)=(3)/(4)	<u>RL Weights</u> (7)=(6)*(5)
			<u>Service Life</u> (4)	<u>Remaining Life</u> (5)		
1970	34.5	10,436	79.68	45.18	131	5,917
1969	35.5	0	79.80	44.30	0	0
1968	36.5	0	79.92	43.42	0	0
1967	37.5	0	80.04	42.54	0	0
1966	38.5	0	80.18	41.68	0	0
1965	39.5	0	80.32	40.82	0	0
1964	40.5	0	80.46	39.96	0	0
1963	41.5	1,741	80.62	39.12	22	845
1962	42.5	0	80.78	38.28	0	0
1961	43.5	1,206,133	80.95	37.45	14,900	558,003
		1,554,581			19,345	859,481

AVERAGE SERVICE LIFE 80.4  
AVERAGE REMAINING LIFE 44.4

# **Union Light, Heat and Power Company**

## **211 - Liquid Petroleum Gas Equipment**

**KyPSC Staff Second Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 5, 2005**  
**Response Due Date: April 19, 2005**

**KyPSC-DR-02-013**

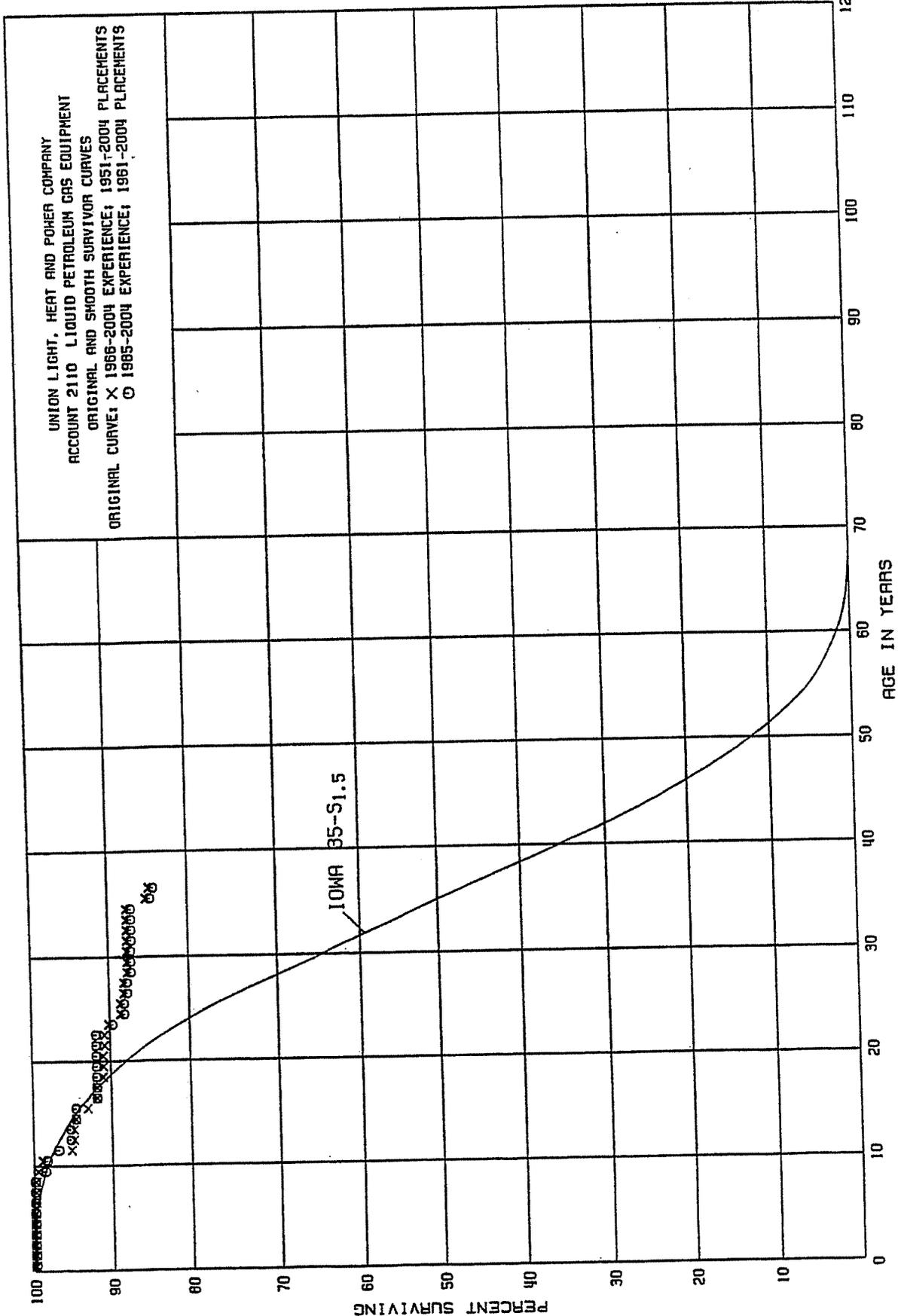
**REQUEST:**

13. Refer to the Application, Tab 34, page III-16. Concerning Account 2110, Liquid Petroleum Gas Equipment, the Iowa curve 35-S1.5 does not appear to represent a good match to the survival intervals.
- a. Indicate whether an Iowa curve that provides a better match for this account exists and provide a copy of that curve.
  - b. Would ULH&P agree that if a better fitting Iowa curve is chosen for Account 2110, the depreciation rate would be lower than the 2.45 percent proposed in the depreciation study? Explain the response.

**RESPONSE:**

- a. There are possible Iowa curves that would statistically match the original survivor curve better than the 35-S1.5; however, determining the most appropriate survivor curve for each account is more than just a statistical match. The 35-S1.5 curve was determined to be the most appropriate Iowa curve for this account because the average service life and survivor curve combination is the best estimation of life characteristics of the assets within the account. The life and curve combination is comparable to estimates of other electric utilities as well.
- b. I would not agree that all other possible Iowa curves would lower the 2.45% depreciation rate for Account 2110. There are many survivor curves with a high mode that could produce a higher rate depending on the average service life and the surviving age distribution at the time of calculation.

**WITNESS RESPONSIBLE: John J. Spanos**



**Observed Life Table Results  
Union Light, Heat and Power Company  
Account: 211 - Liquid Petroleum Gas Equipment**

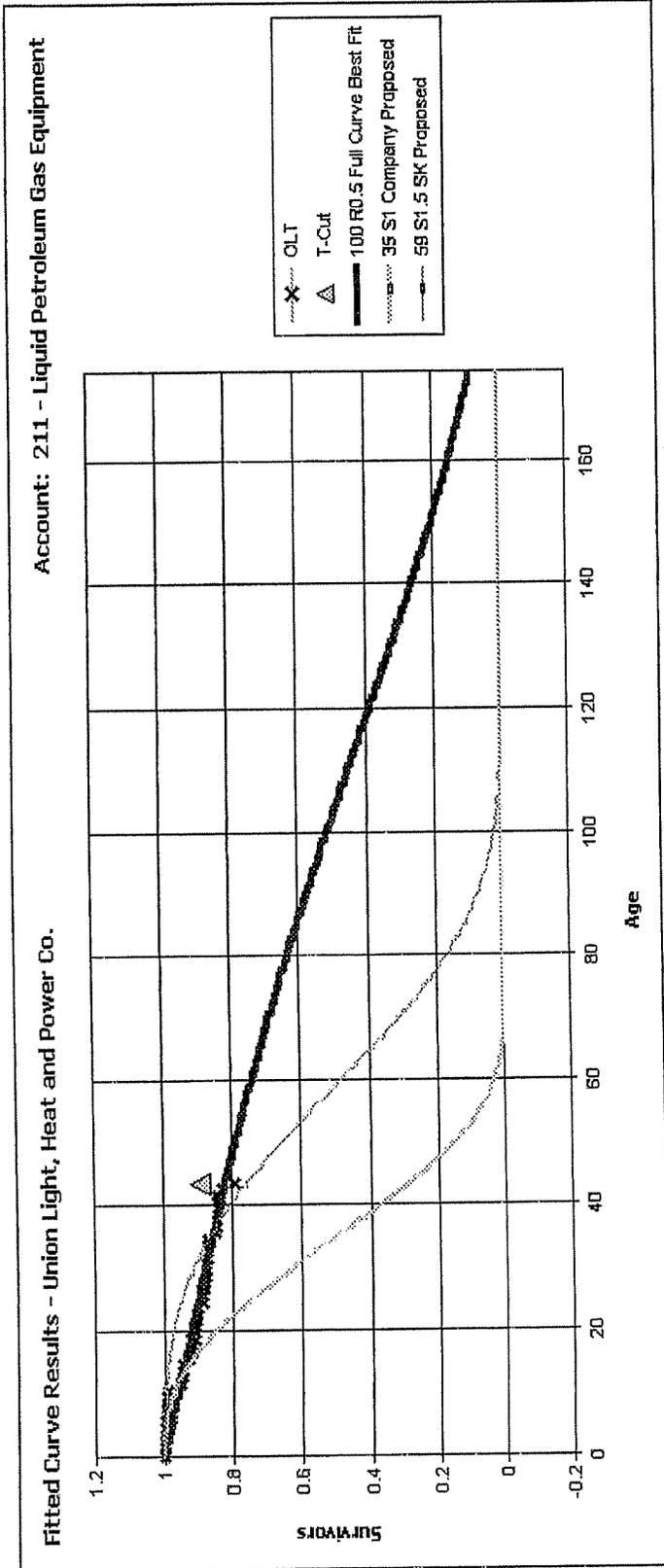
Age	Exposures	Retirement	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
<b>BAND</b>		<b>1951 - 2004</b>			
0	3,972,911	0	0.0000	100.0000	1.0000
0.5	3,497,923	0	0.0000	100.0000	1.0000
1.5	3,039,203	0	0.0000	100.0000	1.0000
2.5	2,536,994	0	0.0000	100.0000	1.0000
3.5	2,536,994	0	0.0000	100.0000	1.0000
4.5	2,179,018	3,235	0.1485	99.8515	1.0000
5.5	2,130,019	644	0.0302	99.9698	0.9985
6.5	2,088,225	0	0.0000	100.0000	0.9982
7.5	2,057,818	515	0.0250	99.9750	0.9982
8.5	1,983,934	5,075	0.2558	99.7442	0.9980
9.5	1,977,708	12,419	0.6280	99.3720	0.9954
10.5	1,963,804	71,731	3.6526	96.3474	0.9892
11.5	1,881,193	7,838	0.4166	99.5834	0.9530
12.5	1,847,714	0	0.0000	100.0000	0.9491
13.5	1,847,714	5,511	0.2983	99.7017	0.9491
14.5	1,842,203	28,691	1.5574	98.4426	0.9462
15.5	1,753,413	25,272	1.4413	98.5587	0.9315
16.5	1,728,140	0	0.0000	100.0000	0.9181
17.5	1,700,952	15,248	0.8964	99.1036	0.9181
18.5	1,685,705	1,767	0.1048	99.8952	0.9098
19.5	1,683,938	0	0.0000	100.0000	0.9089
20.5	1,672,906	3,155	0.1886	99.8114	0.9089
21.5	1,669,750	0	0.0000	100.0000	0.9072
22.5	1,669,750	10,907	0.6532	99.3468	0.9072
23.5	1,651,682	29,612	1.7928	98.2072	0.9012
24.5	1,563,717	0	0.0000	100.0000	0.8851
25.5	1,498,162	7,716	0.5150	99.4850	0.8851
26.5	1,485,467	0	0.0000	100.0000	0.8805
27.5	1,477,841	8,627	0.5838	99.4162	0.8805
28.5	1,454,830	0	0.0000	100.0000	0.8754
29.5	1,341,331	0	0.0000	100.0000	0.8754
30.5	1,319,443	925	0.0701	99.9299	0.8754
31.5	1,318,518	0	0.0000	100.0000	0.8748
32.5	1,291,491	0	0.0000	100.0000	0.8748
33.5	1,212,759	0	0.0000	100.0000	0.8748
34.5	1,212,759	34,828	2.8718	97.1282	0.8748
35.5	1,177,931	5,162	0.4382	99.5618	0.8497
36.5	1,169,307	0	0.0000	100.0000	0.8459
37.5	1,169,307	0	0.0000	100.0000	0.8459
38.5	1,158,784	0	0.0000	100.0000	0.8459
39.5	1,156,764	0	0.0000	100.0000	0.8459
40.5	1,154,737	1,722	0.1491	99.8509	0.8459
41.5	1,153,015	22,398	1.9425	98.0575	0.8447
42.5	1,130,617	50,879	4.5001	95.4999	0.8283
43.5	0	0	0.0000	100.0000	0.7910

**Best Fit Curve Results**  
**Union Light, Heat & Power Co**  
**Account: 211 - Liquid Petroleum Gas Equipment**

Curve	Life	Sum of Squared Differences
<b>BAND</b>	<b>1966 - 2004</b>	
R0.5	100.0	90.187
S-0.5	95.0	97.677
R1	81.0	98.101
R1.5	69.0	138.208
L0	100.0	150.070
L0.5	91.0	172.508
R2	61.0	266.967
S0.5	70.0	317.992
O1	100.0	327.415
L1	79.0	341.843
R2.5	56.0	438.522
L1.5	70.0	470.029
S1	63.0	553.659
S1.5	59.0	738.056
O2	100.0	757.493
R3	53.0	759.146
L2	64.0	784.661
S2	56.0	1,072.602
L3	56.0	1,314.720
R4	49.0	1,444.205
S3	52.0	1,646.999
L4	50.0	1,818.804
S4	48.0	2,379.050
R5	47.0	2,484.227
L5	48.0	2,536.748
S5	47.0	3,023.522
S6	45.0	3,569.829
O3	100.0	4,395.189
SQ	44.0	4,837.586
O4	100.0	12,009.786
S0	1.0	378,490.962

**Analytical Parameters**

OLT Placement Band: 1951 - 2004  
 OLT Experience Band: 1966 - 2004  
 Minimum Life Parameter: 1  
 Maximum Life Parameter: 100  
 Life Increment Parameter: 1  
 Max Age (T-Cut): 43.5



**Analytical Parameters**

OLT Placement Band: 1951 - 2004  
 OLT Experience Band: 1966 - 2004  
 Minimum Life Parameter: 1  
 Maximum Life Parameter: 100  
 Life Increment Parameter: 1  
 Max Age (T-Cut): 43.5

**Observed Life Table Results**  
**Union Light, Heat and Power Company**  
**Account: 211 - Liquid Petroleum Gas Equipment**

Age	Exposures	Retiremen	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
<b>BAND</b>		<b>1966 - 2004</b>			
0	2,625,144	0	0.0000	100.0000	1.0000
0.5	2,152,177	0	0.0000	100.0000	1.0000
1.5	1,695,483	0	0.0000	100.0000	1.0000
2.5	1,193,275	0	0.0000	100.0000	1.0000
3.5	1,193,275	0	0.0000	100.0000	1.0000
4.5	2,175,863	3,235	0.1487	99.8513	1.0000
5.5	2,126,863	644	0.0303	99.9697	0.9985
6.5	2,085,070	0	0.0000	100.0000	0.9982
7.5	2,054,663	515	0.0250	99.9750	0.9982
8.5	1,980,778	5,075	0.2562	99.7438	0.9980
9.5	1,974,553	12,419	0.6290	99.3710	0.9954
10.5	1,960,649	71,731	3.6585	96.3415	0.9891
11.5	1,878,037	7,838	0.4173	99.5827	0.9530
12.5	1,844,559	0	0.0000	100.0000	0.9490
13.5	1,844,559	5,511	0.2988	99.7012	0.9490
14.5	1,842,203	28,691	1.5574	98.4426	0.9461
15.5	1,753,413	25,272	1.4413	98.5587	0.9314
16.5	1,728,140	0	0.0000	100.0000	0.9180
17.5	1,700,952	15,248	0.8964	99.1036	0.9180
18.5	1,685,705	1,767	0.1048	99.8952	0.9098
19.5	1,683,938	0	0.0000	100.0000	0.9088
20.5	1,672,906	3,155	0.1886	99.8114	0.9088
21.5	1,669,750	0	0.0000	100.0000	0.9071
22.5	1,669,750	10,907	0.6532	99.3468	0.9071
23.5	1,651,682	29,612	1.7928	98.2072	0.9012
24.5	1,563,717	0	0.0000	100.0000	0.8850
25.5	1,498,162	7,716	0.5150	99.4850	0.8850
26.5	1,485,467	0	0.0000	100.0000	0.8804
27.5	1,477,841	8,627	0.5838	99.4162	0.8804
28.5	1,454,830	0	0.0000	100.0000	0.8753
29.5	1,341,331	0	0.0000	100.0000	0.8753
30.5	1,319,443	925	0.0701	99.9299	0.8753
31.5	1,318,518	0	0.0000	100.0000	0.8747
32.5	1,291,491	0	0.0000	100.0000	0.8747
33.5	1,212,759	0	0.0000	100.0000	0.8747
34.5	1,212,759	34,828	2.8718	97.1282	0.8747
35.5	1,177,931	5,162	0.4382	99.5618	0.8496
36.5	1,169,307	0	0.0000	100.0000	0.8459
37.5	1,169,307	0	0.0000	100.0000	0.8459
38.5	1,158,784	0	0.0000	100.0000	0.8459
39.5	1,156,764	0	0.0000	100.0000	0.8459
40.5	1,154,737	1,722	0.1491	99.8509	0.8459
41.5	1,153,015	22,398	1.9425	98.0575	0.8446
42.5	1,130,617	50,879	4.5001	95.4999	0.8282
43.5	0	0	0.0000	100.0000	0.7909

Union Light, Heat and Power Co.

211 - Liquid Petroleum Gas Equipment

Calculation of Remaining Life  
Based Upon Broad Group/Vintage Group Life Group Procedures  
Related to Original Cost as of December 31, 2004

Survivor Curve .. IOWA: 59 S1.5

Year (1)	Age (2)	Surviving Investment (3)	ELG Average		ASL Weights (6)=(3)/(4)	RL Weights (7)=(6)*(5)
			Service Life (4)	Remaining Life (5)		
2004	0.5	474,987	48.98	48.48	9,697	470,138
2003	1.5	458,721	49.02	47.52	9,357	444,685
2002	2.5	502,208	49.09	46.59	10,231	476,632
2001	3.5	0	49.18	45.68	0	0
2000	4.5	357,976	49.28	44.78	7,263	325,291
1999	5.5	45,764	49.41	43.91	926	40,670
1998	6.5	41,150	49.56	43.06	830	35,752
1997	7.5	30,407	49.72	42.22	612	25,820
1996	8.5	73,370	49.90	41.40	1,470	60,872
1995	9.5	1,150	50.09	40.59	23	932
1994	10.5	1,485	50.30	39.80	30	1,175
1993	11.5	10,880	50.53	39.03	215	8,404
1992	12.5	25,641	50.77	38.27	505	19,328
1991	13.5	0	51.02	37.52	0	0
1990	14.5	0	51.30	36.80	0	0
1989	15.5	60,099	51.58	36.08	1,165	42,039
1988	16.5	0	51.87	35.37	0	0
1987	17.5	27,188	52.19	34.69	521	18,071
1986	18.5	0	52.51	34.01	0	0
1985	19.5	0	52.85	33.35	0	0
1984	20.5	11,032	53.20	32.70	207	6,781
1983	21.5	0	53.56	32.06	0	0
1982	22.5	0	53.94	31.44	0	0
1981	23.5	7,162	54.33	30.83	132	4,064
1980	24.5	58,353	54.73	30.23	1,066	32,231
1979	25.5	65,555	55.14	29.64	1,189	35,239
1978	26.5	4,980	55.56	29.06	90	2,605
1977	27.5	7,626	56.00	28.50	136	3,881
1976	28.5	14,384	56.45	27.95	255	7,122
1975	29.5	113,499	56.90	27.40	1,995	54,659
1974	30.5	21,887	57.37	26.87	381	10,252
1973	31.5	0	57.85	26.35	0	0
1972	32.5	27,027	58.34	25.84	463	11,971
1971	33.5	78,733	58.84	25.34	1,338	33,906

Union Light, Heat and Power Co.

211 - Liquid Petroleum Gas Equipment

Calculation of Remaining Life  
Based Upon Broad Group/Vintage Group Life Group Procedures  
Related to Original Cost as of December 31, 2004

Survivor Curve .. IOWA: 59 S1.5

<u>Year</u> (1)	<u>Age</u> (2)	<u>Surviving Investment</u> (3)	<u>ELG Average</u>		<u>ASL Weights</u> (6)=(3)/(4)	<u>RL Weights</u> (7)=(6)*(5)
			<u>Service Life</u> (4)	<u>Remaining Life</u> (5)		
1970	34.5	0	59.35	24.85	0	0
1969	35.5	0	59.86	24.36	0	0
1968	36.5	3,463	60.39	23.89	57	1,370
1967	37.5	0	60.93	23.43	0	0
1966	38.5	10,523	61.47	22.97	171	3,932
1965	39.5	2,020	62.03	22.53	33	734
1964	40.5	2,027	62.59	22.09	32	715
1963	41.5	0	63.16	21.66	0	0
1962	42.5	0	63.73	21.23	0	0
1961	43.5	1,079,738	64.32	20.82	16,787	349,494
1960	44.5	0	64.91	20.41	0	0
1959	45.5	0	65.51	20.01	0	0
1958	46.5	0	66.12	19.62	0	0
1957	47.5	0	66.73	19.23	0	0
1956	48.5	0	67.35	18.85	0	0
1955	49.5	0	67.98	18.48	0	0
1954	50.5	0	68.61	18.11	0	0
1953	51.5	0	69.25	17.75	0	0
1952	52.5	0	69.89	17.39	0	0
1951	53.5	0	70.54	17.04	0	0

3,619,035

67,179 2,528,764

AVERAGE SERVICE LIFE 53.9  
AVERAGE REMAINING LIFE 37.6

# **Union Light, Heat and Power Company**

## **274.1 - Rights of Way - General**

**KyPSC Staff Second Set Data Requests  
ULH&P Case No. 2005-00042  
Date Received: April 5, 2005  
Response Due Date: April 19, 2005**

**KyPSC-DR-02-014**

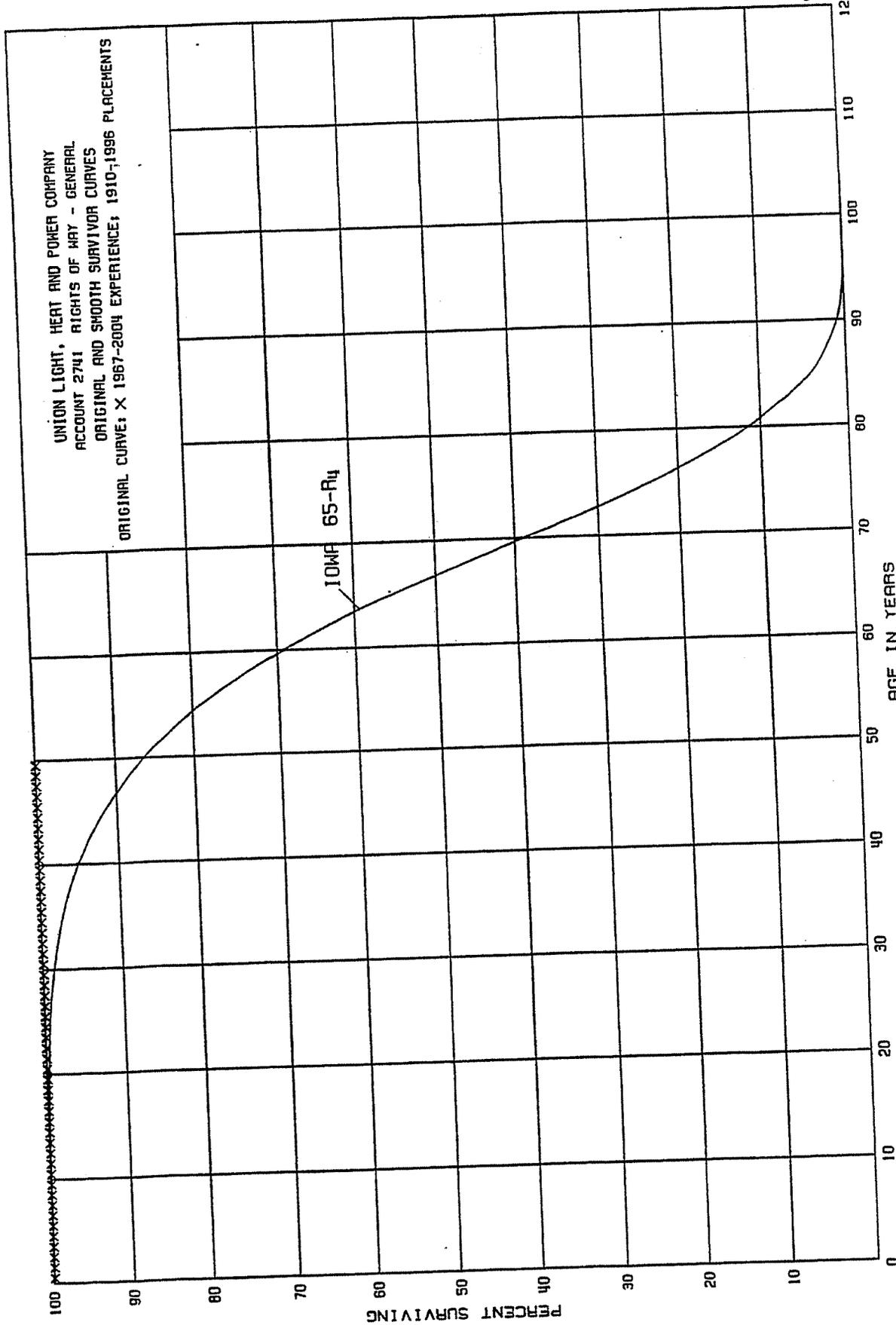
**REQUEST:**

14. Refer to the Application, Tab 34, page III-21. Concerning Account 2741, Rights of Way, the Iowa curve 65-R4 shifts inward while the plotted data points reflect a constant straight line.
- a. Explain why ULH&P considers the Iowa curve 65-R4 to be the best match for this account.
  - b. Would ULH&P agree that an Iowa curve with a better match would result in a depreciation rate lower than the proposed 1.39 percent? Explain the response.
  - c. Indicate whether an Iowa curve that provides a better match for this account exists and provide a copy of that curve.

**RESPONSE:**

- a. There is no Iowa curve that will statistically match the original curve for Account 2741. The 65-R4 was selected based on judgment, given the nature of the assets, the past estimate for this account, and the estimates by other utilities for similar assets.
- b. There is no Iowa curve that would better match the original survivor curve; therefore, there are many combinations that could produce a lower depreciation rate than the proposed 1.39% and many combinations that could produce a higher depreciation rate. The Iowa curve for this account can only be determined by judgment.
- c. See response to KyPSC-DR-02-014(a) and (b).

**WITNESS RESPONSIBLE: John J. Spanos**



UNION LIGHT, HEAT AND POWER COMPANY  
ACCOUNT 2741 RIGHTS OF WAY - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1910-1996			EXPERIENCE BAND 1967-2004		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	777,360		0.0000	1.0000	100.00
0.5	778,431		0.0000	1.0000	100.00
1.5	913,047	152	0.0002	0.9998	100.00
2.5	914,886		0.0000	1.0000	99.98
3.5	916,701		0.0000	1.0000	99.98
4.5	935,774		0.0000	1.0000	99.98
5.5	942,793		0.0000	1.0000	99.98
6.5	943,902		0.0000	1.0000	99.98
7.5	945,848		0.0000	1.0000	99.98
8.5	920,965		0.0000	1.0000	99.98
9.5	935,187		0.0000	1.0000	99.98
10.5	830,268		0.0000	1.0000	99.98
11.5	848,144		0.0000	1.0000	99.98
12.5	667,173		0.0000	1.0000	99.98
13.5	639,508		0.0000	1.0000	99.98
14.5	603,756		0.0000	1.0000	99.98
15.5	533,842		0.0000	1.0000	99.98
16.5	518,497		0.0000	1.0000	99.98
17.5	496,927		0.0000	1.0000	99.98
18.5	472,568		0.0000	1.0000	99.98
19.5	462,529		0.0000	1.0000	99.98
20.5	459,504		0.0000	1.0000	99.98
21.5	453,070		0.0000	1.0000	99.98
22.5	408,615		0.0000	1.0000	99.98
23.5	403,503		0.0000	1.0000	99.98
24.5	387,618		0.0000	1.0000	99.98
25.5	386,676		0.0000	1.0000	99.98
26.5	382,944		0.0000	1.0000	99.98
27.5	360,837		0.0000	1.0000	99.98
28.5	352,254		0.0000	1.0000	99.98
29.5	323,834		0.0000	1.0000	99.98
30.5	306,874		0.0000	1.0000	99.98
31.5	299,939		0.0000	1.0000	99.98
32.5	264,330		0.0000	1.0000	99.98
33.5	251,948		0.0000	1.0000	99.98
34.5	242,328		0.0000	1.0000	99.98
35.5	238,847		0.0000	1.0000	99.98
36.5	233,760		0.0000	1.0000	99.98
37.5	221,037		0.0000	1.0000	99.98
38.5	241,725		0.0000	1.0000	99.98

UNION LIGHT, HEAT AND POWER COMPANY  
ACCOUNT 2741 RIGHTS OF WAY - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-1996		EXPERIENCE BAND 1967-2004			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	106,736		0.0000	1.0000	99.98
40.5	104,745		0.0000	1.0000	99.98
41.5	102,930		0.0000	1.0000	99.98
42.5	83,857		0.0000	1.0000	99.98
43.5	76,838		0.0000	1.0000	99.98
44.5	75,729		0.0000	1.0000	99.98
45.5	73,783		0.0000	1.0000	99.98
46.5	73,475		0.0000	1.0000	99.98
47.5	58,344		0.0000	1.0000	99.98
48.5	58,163		0.0000	1.0000	99.98
49.5	30,522		0.0000	1.0000	99.98
50.5	30,497		0.0000	1.0000	99.98
51.5	28,670		0.0000	1.0000	99.98
52.5	27,328		0.0000	1.0000	99.98
53.5	27,328		0.0000	1.0000	99.98
54.5	27,328		0.0000	1.0000	99.98
55.5	27,328		0.0000	1.0000	99.98
56.5	27,328		0.0000	1.0000	99.98
57.5	27,328		0.0000	1.0000	99.98
58.5	27,328		0.0000	1.0000	99.98
59.5	27,328		0.0000	1.0000	99.98
60.5	27,328		0.0000	1.0000	99.98
61.5	27,328		0.0000	1.0000	99.98
62.5	27,328		0.0000	1.0000	99.98
63.5	27,328		0.0000	1.0000	99.98
64.5	27,328		0.0000	1.0000	99.98
65.5	27,328		0.0000	1.0000	99.98
66.5	27,328		0.0000	1.0000	99.98
67.5	27,328		0.0000	1.0000	99.98
68.5	27,328		0.0000	1.0000	99.98
69.5	27,328		0.0000	1.0000	99.98
70.5	5,569		0.0000	1.0000	99.98
71.5					
72.5			0.0000		
73.5	678		0.0000		
74.5	9,502		0.0000		
75.5	9,502		0.0000		
76.5	9,502		0.0000		
77.5	9,502		0.0000		
78.5	9,502		0.0000		

UNION LIGHT, HEAT AND POWER COMPANY  
ACCOUNT 2741 RIGHTS OF WAY - GENERAL

ORIGINAL LIFE TABLE, CONT.

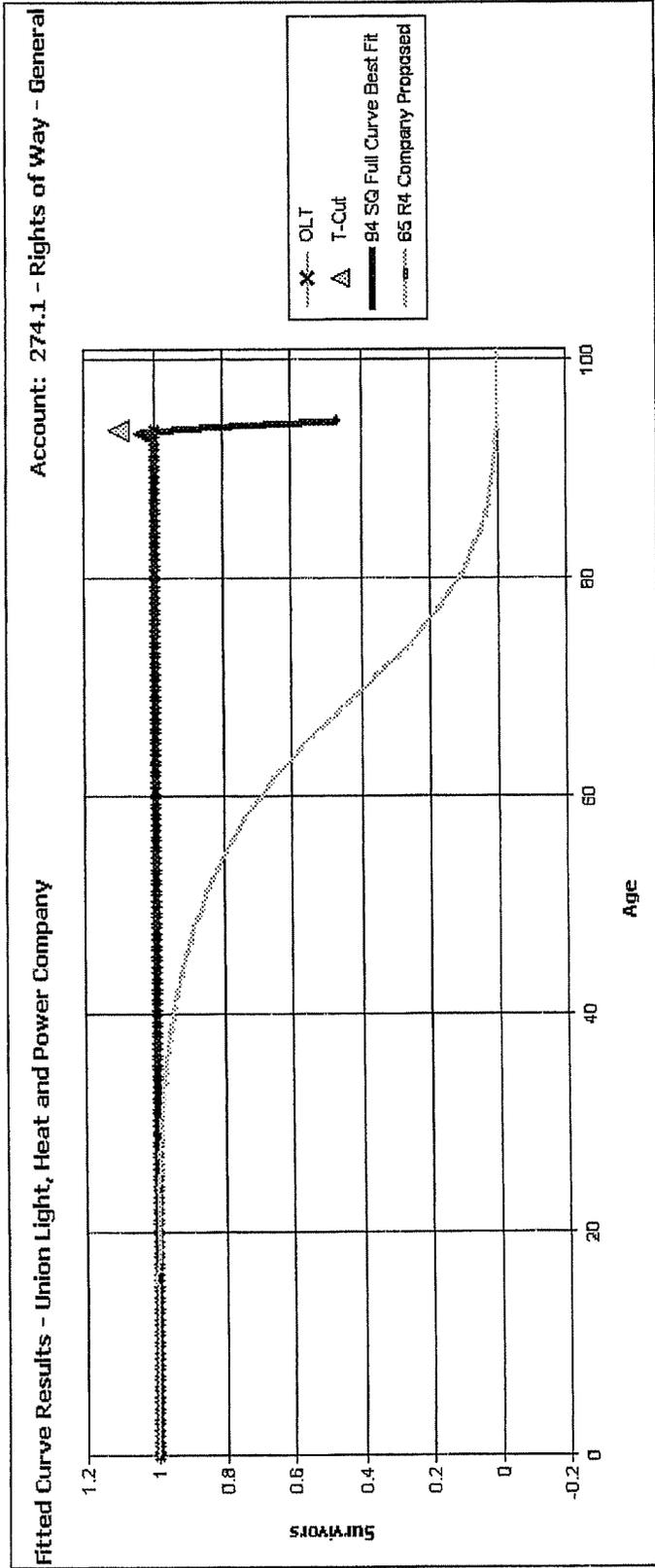
PLACEMENT BAND 1910-1996		EXPERIENCE BAND 1967-2004			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	10,445		0.0000		
80.5	1,621		0.0000		
81.5	1,621		0.0000		
82.5	1,621		0.0000		
83.5	1,621		0.0000		
84.5	1,621		0.0000		
85.5					
86.5					
87.5					
88.5	10,635		0.0000		
89.5	10,635		0.0000		
90.5	10,635		0.0000		
91.5	10,635		0.0000		
92.5	10,635		0.0000		
93.5	10,635		0.0000		
94.5					

**Best Fit Curve Results**  
**Union Light, Heat and Power Company**  
**Account: 274.1 - Rights of Way - General**

Curve	Life	Sum of Squared Differences
<b>BAND</b>	<b>1967 - 2004</b>	
SQ	94.0	0.025
S6	100.0	1,090.113
S5	100.0	4,067.849
R5	100.0	4,995.612
L5	100.0	7,083.478
S4	100.0	9,334.196
R4	100.0	10,625.693
L4	100.0	14,329.604
S3	100.0	17,084.884
R3	100.0	17,524.052
R2.5	100.0	22,495.660
S2	100.0	25,300.542
R2	100.0	28,425.969
L3	100.0	28,933.318
S1.5	100.0	30,236.082
R1.5	100.0	35,522.261
S1	100.0	36,008.409
S0.5	100.0	42,138.189
R1	100.0	43,800.705
L2	100.0	44,107.015
L1.5	100.0	51,020.932
R0.5	100.0	55,597.678
S-0.5	100.0	58,383.888
L1	100.0	59,262.315
L0.5	100.0	67,830.858
O1	100.0	69,140.059
L0	100.0	77,595.776
O2	100.0	87,366.451
O3	100.0	143,278.488
O4	100.0	202,434.198
S0	1.0	949,694.436

**Analytical Parameters**

OLT Placement Band:	1910 - 1996
OLT Experience Band:	1967 - 2004
Minimum Life Parameter:	1
Maximum Life Parameter:	100
Life Increment Parameter:	1
Max Age (T-Cut):	93.5



**Analytical Parameters**

OLT Placement Band: 1910 - 1996

OLT Experience Band: 1967 - 2004

Minimum Life Parameter: 1

Maximum Life Parameter: 100

Life Increment Parameter: 1

Max Age (T-Cut): 93.5

**Observed Life Table Results**  
**Union Light, Heat and Power Company**  
**Account: 274.1 - Rights of Way - General**

Age	Exposures	Retiremen	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
<b>BAND</b>		<b>1910 - 1996</b>			
0	1,019,783	0	0.0000	100.0000	1.0000
0.5	1,019,783	0	0.0000	100.0000	1.0000
1.5	1,019,783	152	0.0149	99.9851	1.0000
2.5	1,019,631	0	0.0000	100.0000	0.9999
3.5	1,019,631	0	0.0000	100.0000	0.9999
4.5	1,019,631	0	0.0000	100.0000	0.9999
5.5	1,019,631	0	0.0000	100.0000	0.9999
6.5	1,019,631	0	0.0000	100.0000	0.9999
7.5	1,019,631	0	0.0000	100.0000	0.9999
8.5	994,440	0	0.0000	100.0000	0.9999
9.5	993,530	0	0.0000	100.0000	0.9999
10.5	888,432	0	0.0000	100.0000	0.9999
11.5	878,667	0	0.0000	100.0000	0.9999
12.5	697,669	0	0.0000	100.0000	0.9999
13.5	668,178	0	0.0000	100.0000	0.9999
14.5	631,084	0	0.0000	100.0000	0.9999
15.5	561,170	0	0.0000	100.0000	0.9999
16.5	545,825	0	0.0000	100.0000	0.9999
17.5	524,255	0	0.0000	100.0000	0.9999
18.5	499,896	0	0.0000	100.0000	0.9999
19.5	489,857	0	0.0000	100.0000	0.9999
20.5	486,832	0	0.0000	100.0000	0.9999
21.5	480,397	0	0.0000	100.0000	0.9999
22.5	435,943	0	0.0000	100.0000	0.9999
23.5	430,830	0	0.0000	100.0000	0.9999
24.5	414,945	0	0.0000	100.0000	0.9999
25.5	414,003	0	0.0000	100.0000	0.9999
26.5	410,272	0	0.0000	100.0000	0.9999
27.5	388,164	0	0.0000	100.0000	0.9999
28.5	379,582	0	0.0000	100.0000	0.9999
29.5	351,162	0	0.0000	100.0000	0.9999
30.5	334,201	0	0.0000	100.0000	0.9999
31.5	327,267	0	0.0000	100.0000	0.9999
32.5	291,658	0	0.0000	100.0000	0.9999
33.5	273,707	0	0.0000	100.0000	0.9999
34.5	264,087	0	0.0000	100.0000	0.9999
35.5	260,606	0	0.0000	100.0000	0.9999
36.5	255,519	0	0.0000	100.0000	0.9999
37.5	242,796	0	0.0000	100.0000	0.9999
38.5	241,725	0	0.0000	100.0000	0.9999
39.5	106,736	0	0.0000	100.0000	0.9999
40.5	104,745	0	0.0000	100.0000	0.9999
41.5	102,930	0	0.0000	100.0000	0.9999
42.5	83,857	0	0.0000	100.0000	0.9999
43.5	76,838	0	0.0000	100.0000	0.9999

**Observed Life Table Results**  
**Union Light, Heat and Power Company**  
**Account: 274.1 - Rights of Way - General**

Age	Exposures	Retiremen	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
44.5	75,729	0	0.0000	100.0000	0.9999
45.5	73,783	0	0.0000	100.0000	0.9999
46.5	73,475	0	0.0000	100.0000	0.9999
47.5	58,344	0	0.0000	100.0000	0.9999
48.5	58,163	0	0.0000	100.0000	0.9999
49.5	30,522	0	0.0000	100.0000	0.9999
50.5	30,497	0	0.0000	100.0000	0.9999
51.5	28,670	0	0.0000	100.0000	0.9999
52.5	27,328	0	0.0000	100.0000	0.9999
53.5	27,328	0	0.0000	100.0000	0.9999
54.5	27,328	0	0.0000	100.0000	0.9999
55.5	27,328	0	0.0000	100.0000	0.9999
56.5	27,328	0	0.0000	100.0000	0.9999
57.5	27,328	0	0.0000	100.0000	0.9999
58.5	27,328	0	0.0000	100.0000	0.9999
59.5	27,328	0	0.0000	100.0000	0.9999
60.5	27,328	0	0.0000	100.0000	0.9999
61.5	27,328	0	0.0000	100.0000	0.9999
62.5	27,328	0	0.0000	100.0000	0.9999
63.5	27,328	0	0.0000	100.0000	0.9999
64.5	27,328	0	0.0000	100.0000	0.9999
65.5	27,328	0	0.0000	100.0000	0.9999
66.5	27,328	0	0.0000	100.0000	0.9999
67.5	27,328	0	0.0000	100.0000	0.9999
68.5	27,328	0	0.0000	100.0000	0.9999
69.5	27,328	0	0.0000	100.0000	0.9999
70.5	5,569	0	0.0000	100.0000	0.9999
71.5	0	0	0.0000	100.0000	0.9999
72.5	0	0	0.0000	100.0000	0.9999
73.5	678	0	0.0000	100.0000	0.9999
74.5	9,502	0	0.0000	100.0000	0.9999
75.5	9,502	0	0.0000	100.0000	0.9999
76.5	9,502	0	0.0000	100.0000	0.9999
77.5	9,502	0	0.0000	100.0000	0.9999
78.5	9,502	0	0.0000	100.0000	0.9999
79.5	10,445	0	0.0000	100.0000	0.9999
80.5	1,621	0	0.0000	100.0000	0.9999
81.5	1,621	0	0.0000	100.0000	0.9999
82.5	1,621	0	0.0000	100.0000	0.9999
83.5	1,621	0	0.0000	100.0000	0.9999
84.5	1,621	0	0.0000	100.0000	0.9999
85.5	0	0	0.0000	100.0000	0.9999
86.5	0	0	0.0000	100.0000	0.9999
87.5	0	0	0.0000	100.0000	0.9999
88.5	10,635	0	0.0000	100.0000	0.9999
89.5	10,635	0	0.0000	100.0000	0.9999

**Observed Life Table Results**  
**Union Light, Heat and Power Company**  
**Account: 274.1 - Rights of Way - General**

Age	Exposures	Retiremen	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
90.5	10,635	0	0.0000	100.0000	0.9999
91.5	10,635	0	0.0000	100.0000	0.9999
92.5	10,635	0	0.0000	100.0000	0.9999
93.5	10,635	0	0.0000	100.0000	0.9999

**Observed Life Table Results**  
**Union Light, Heat and Power Company**  
**Account: 274.1 - Rights of Way - General**

Age	Exposures	Retiremen	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
<b>BAND</b>		<b>1967 - 1996</b>			
0	777,360	0	0.0000	100.0000	1.0000
0.5	778,431	0	0.0000	100.0000	1.0000
1.5	913,047	152	0.0166	99.9834	1.0000
2.5	914,886	0	0.0000	100.0000	0.9998
3.5	916,701	0	0.0000	100.0000	0.9998
4.5	935,774	0	0.0000	100.0000	0.9998
5.5	942,793	0	0.0000	100.0000	0.9998
6.5	943,902	0	0.0000	100.0000	0.9998
7.5	945,848	0	0.0000	100.0000	0.9998
8.5	920,965	0	0.0000	100.0000	0.9998
9.5	935,187	0	0.0000	100.0000	0.9998
10.5	830,268	0	0.0000	100.0000	0.9998
11.5	848,144	0	0.0000	100.0000	0.9998
12.5	667,173	0	0.0000	100.0000	0.9998
13.5	639,508	0	0.0000	100.0000	0.9998
14.5	603,756	0	0.0000	100.0000	0.9998
15.5	533,842	0	0.0000	100.0000	0.9998
16.5	518,497	0	0.0000	100.0000	0.9998
17.5	496,927	0	0.0000	100.0000	0.9998
18.5	472,568	0	0.0000	100.0000	0.9998
19.5	462,529	0	0.0000	100.0000	0.9998
20.5	459,504	0	0.0000	100.0000	0.9998
21.5	453,070	0	0.0000	100.0000	0.9998
22.5	408,615	0	0.0000	100.0000	0.9998
23.5	403,503	0	0.0000	100.0000	0.9998
24.5	387,618	0	0.0000	100.0000	0.9998
25.5	386,676	0	0.0000	100.0000	0.9998
26.5	382,944	0	0.0000	100.0000	0.9998
27.5	360,837	0	0.0000	100.0000	0.9998
28.5	352,254	0	0.0000	100.0000	0.9998
29.5	323,834	0	0.0000	100.0000	0.9998
30.5	306,874	0	0.0000	100.0000	0.9998
31.5	299,939	0	0.0000	100.0000	0.9998
32.5	264,330	0	0.0000	100.0000	0.9998
33.5	251,948	0	0.0000	100.0000	0.9998
34.5	242,328	0	0.0000	100.0000	0.9998
35.5	238,847	0	0.0000	100.0000	0.9998
36.5	233,760	0	0.0000	100.0000	0.9998
37.5	221,037	0	0.0000	100.0000	0.9998
38.5	241,725	0	0.0000	100.0000	0.9998
39.5	106,736	0	0.0000	100.0000	0.9998
40.5	104,745	0	0.0000	100.0000	0.9998
41.5	102,930	0	0.0000	100.0000	0.9998
42.5	83,857	0	0.0000	100.0000	0.9998
43.5	76,838	0	0.0000	100.0000	0.9998

**Observed Life Table Results**  
**Union Light, Heat and Power Company**  
**Account: 274.1 - Rights of Way - General**

Age	Exposures	Retiremen	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
44.5	75,729	0	0.0000	100.0000	0.9998
45.5	73,783	0	0.0000	100.0000	0.9998
46.5	73,475	0	0.0000	100.0000	0.9998
47.5	58,344	0	0.0000	100.0000	0.9998
48.5	58,163	0	0.0000	100.0000	0.9998
49.5	30,522	0	0.0000	100.0000	0.9998
50.5	30,497	0	0.0000	100.0000	0.9998
51.5	28,670	0	0.0000	100.0000	0.9998
52.5	27,328	0	0.0000	100.0000	0.9998
53.5	27,328	0	0.0000	100.0000	0.9998
54.5	27,328	0	0.0000	100.0000	0.9998
55.5	27,328	0	0.0000	100.0000	0.9998
56.5	27,328	0	0.0000	100.0000	0.9998
57.5	27,328	0	0.0000	100.0000	0.9998
58.5	27,328	0	0.0000	100.0000	0.9998
59.5	27,328	0	0.0000	100.0000	0.9998
60.5	27,328	0	0.0000	100.0000	0.9998
61.5	27,328	0	0.0000	100.0000	0.9998
62.5	27,328	0	0.0000	100.0000	0.9998
63.5	27,328	0	0.0000	100.0000	0.9998
64.5	27,328	0	0.0000	100.0000	0.9998
65.5	27,328	0	0.0000	100.0000	0.9998
66.5	27,328	0	0.0000	100.0000	0.9998
67.5	27,328	0	0.0000	100.0000	0.9998
68.5	27,328	0	0.0000	100.0000	0.9998
69.5	27,328	0	0.0000	100.0000	0.9998
70.5	5,569	0	0.0000	100.0000	0.9998
71.5	0	0	0.0000	100.0000	0.9998
72.5	0	0	0.0000	100.0000	0.9998
73.5	678	0	0.0000	100.0000	0.9998
74.5	9,502	0	0.0000	100.0000	0.9998
75.5	9,502	0	0.0000	100.0000	0.9998
76.5	9,502	0	0.0000	100.0000	0.9998
77.5	9,502	0	0.0000	100.0000	0.9998
78.5	9,502	0	0.0000	100.0000	0.9998
79.5	10,445	0	0.0000	100.0000	0.9998
80.5	1,621	0	0.0000	100.0000	0.9998
81.5	1,621	0	0.0000	100.0000	0.9998
82.5	1,621	0	0.0000	100.0000	0.9998
83.5	1,621	0	0.0000	100.0000	0.9998
84.5	1,621	0	0.0000	100.0000	0.9998
85.5	0	0	0.0000	100.0000	0.9998
86.5	0	0	0.0000	100.0000	0.9998
87.5	0	0	0.0000	100.0000	0.9998
88.5	10,635	0	0.0000	100.0000	0.9998
89.5	10,635	0	0.0000	100.0000	0.9998

**Observed Life Table Results**  
**Union Light, Heat and Power Company**  
**Account: 274.1 - Rights of Way - General**

Age	Exposures	Retiremen	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
90.5	10,635	0	0.0000	100.0000	0.9998
91.5	10,635	0	0.0000	100.0000	0.9998
92.5	10,635	0	0.0000	100.0000	0.9998
93.5	10,635	0	0.0000	100.0000	0.9998

Union Light, Heat and Power Co.

274.1 - Rights of Way - General

Calculation of Remaining Life  
Based Upon Broad Group/Vintage Group Life Group Procedures  
Related to Original Cost as of December 31, 2004

Survivor Curve .. IOWA: 100 R4						
Year	Age	Surviving Investment	ELG Average		ASL Weights	RL Weights
			Service Life	Remaining Life		
(1)	(2)	(3)	(4)	(5)	(6)=(3)/(4)	(7)=(6)*(5)
2004	0.5	0	93.89	93.39	0	0
2003	1.5	0	93.97	92.47	0	0
2002	2.5	0	94.02	91.52	0	0
2001	3.5	0	94.05	90.55	0	0
2000	4.5	0	94.08	89.58	0	0
1999	5.5	0	94.11	88.61	0	0
1998	6.5	0	94.13	87.63	0	0
1997	7.5	0	94.16	86.66	0	0
1996	8.5	25,191	94.18	85.68	267	22,918
1995	9.5	910	94.21	84.71	10	818
1994	10.5	105,099	94.23	83.73	1,115	93,388
1993	11.5	9,765	94.26	82.76	104	8,574
1992	12.5	180,997	94.28	81.78	1,920	157,001
1991	13.5	29,491	94.31	80.81	313	25,269
1990	14.5	37,094	94.34	79.84	393	31,393
1989	15.5	69,914	94.37	78.87	741	58,431
1988	16.5	15,345	94.40	77.90	163	12,663
1987	17.5	21,570	94.43	76.93	228	17,573
1986	18.5	24,359	94.47	75.97	258	19,589
1985	19.5	10,039	94.50	75.00	106	7,968
1984	20.5	3,025	94.54	74.04	32	2,369
1983	21.5	6,960	94.58	73.08	74	5,378
1982	22.5	44,455	94.62	72.12	470	33,883
1981	23.5	5,112	94.66	71.16	54	3,843
1980	24.5	15,885	94.71	70.21	168	11,776
1979	25.5	942	94.76	69.26	10	688
1978	26.5	3,731	94.81	68.31	39	2,688
1977	27.5	22,108	94.86	67.36	233	15,699
1976	28.5	8,582	94.92	66.42	90	6,006
1975	29.5	28,420	94.98	65.48	299	19,593
1974	30.5	16,961	95.04	64.54	178	11,518
1973	31.5	6,935	95.11	63.61	73	4,638
1972	32.5	35,609	95.18	62.68	374	23,450
1971	33.5	17,951	95.25	61.75	188	11,638

Union Light, Heat and Power Co.

274.1 - Rights of Way - General

Calculation of Remaining Life  
Based Upon Broad Group/Vintage Group Life Group Procedures  
Related to Original Cost as of December 31, 2004

Survivor Curve .. IOWA: 100 R4						
Year (1)	Age (2)	Surviving Investment (3)	ELG Average		ASL Weights (6)=(3)/(4)	RL Weights (7)=(6)*(5)
			Service Life (4)	Remaining Life (5)		
1970	34.5	9,619	95.33	60.83	101	6,138
1969	35.5	3,481	95.41	59.91	36	2,186
1968	36.5	5,088	95.50	59.00	53	3,143
1967	37.5	12,723	95.59	58.09	133	7,732
1966	38.5	1,070	95.68	57.18	11	640
1965	39.5	134,989	95.78	56.28	1,409	79,321
1964	40.5	1,991	95.89	55.39	21	1,150
1963	41.5	1,815	95.99	54.49	19	1,030
1962	42.5	19,073	96.11	53.61	198	10,639
1961	43.5	7,019	96.23	52.73	73	3,846
1960	44.5	1,109	96.35	51.85	12	597
1959	45.5	1,946	96.48	50.98	20	1,028
1958	46.5	308	96.61	50.11	3	160
1957	47.5	15,131	96.75	49.25	156	7,703
1956	48.5	180	96.90	48.40	2	90
1955	49.5	27,641	97.05	47.55	285	13,543
1954	50.5	26	97.21	46.71	0	12
1953	51.5	1,827	97.38	45.88	19	861
1952	52.5	1,342	97.55	45.05	14	620
1951	53.5	0	97.72	44.22	0	0
1950	54.5	0	97.91	43.41	0	0
1949	55.5	0	98.10	42.60	0	0
1948	56.5	0	98.30	41.80	0	0
1947	57.5	0	98.50	41.00	0	0
1946	58.5	0	98.71	40.21	0	0
1945	59.5	0	98.93	39.43	0	0
1944	60.5	0	99.15	38.65	0	0
1943	61.5	0	99.39	37.89	0	0
1942	62.5	0	99.62	37.12	0	0
1941	63.5	0	99.87	36.37	0	0
1940	64.5	0	100.12	35.62	0	0
1939	65.5	0	100.38	34.88	0	0
1938	66.5	0	100.65	34.15	0	0
1937	67.5	0	100.93	33.43	0	0

## Union Light, Heat and Power Co.

## 274.1 - Rights of Way - General

Calculation of Remaining Life  
Based Upon Broad Group/Vintage Group Life Group Procedures  
Related to Original Cost as of December 31, 2004

Survivor Curve .. IOWA:

100

R4

Year (1)	Age (2)	Surviving Investment (3)	ELG Average		ASL Weights (6)=(3)/(4)	RL Weights (7)=(6)*(5)
			Service Life (4)	Remaining Life (5)		
1936	68.5	0	101.21	32.71	0	0
1935	69.5	0	101.50	32.00	0	0
1934	70.5	0	101.79	31.29	0	0
1933	71.5	5,569	102.09	30.59	55	1,669
1932	72.5	0	102.40	29.90	0	0
1931	73.5	0	102.72	29.22	0	0
1930	74.5	0	103.04	28.54	0	0
1929	75.5	0	103.37	27.87	0	0
1928	76.5	0	103.71	27.21	0	0
1927	77.5	0	104.05	26.55	0	0
1926	78.5	0	104.40	25.90	0	0
1925	79.5	678	104.75	25.25	6	164
1924	80.5	8,824	105.11	24.61	84	2,066
1923	81.5	0	105.48	23.98	0	0
1922	82.5	0	105.85	23.35	0	0
1921	83.5	0	106.22	22.72	0	0
1920	84.5	0	106.60	22.10	0	0
1919	85.5	1,621	106.99	21.49	15	326
1918	86.5	0	107.38	20.88	0	0
1917	87.5	0	107.78	20.28	0	0
1916	88.5	0	108.19	19.69	0	0
1915	89.5	0	108.61	19.11	0	0
1914	90.5	0	109.04	18.54	0	0
1913	91.5	0	109.48	17.98	0	0
1912	92.5	0	109.93	17.43	0	0
1911	93.5	0	110.40	16.90	0	0
1910	94.5	10,635	110.88	16.38	96	1,571

1,020,156

10,723

754,983

AVERAGE SERVICE LIFE

95.1

AVERAGE REMAINING LIFE

70.4

**UHL&P**  
**Cast Iron Mains and Services**  
**Accounts 2761 and 2801**  
**Net Book Value**  
**30-Sep-04**

<u>Line</u>	<u>Description</u>	<u>Cast Iron Mains</u>	<u>Cast Iron Services</u>	<u>Total</u>
1	Original Cost	\$ 2,535,274	\$ 2,663,011	\$ 5,198,285
2	Book Reserve	2,366,404	3,274,800	5,641,204
3	Net Book Value	<u>\$ 168,870</u>	<u>\$ (611,789)</u>	<u>\$ (442,919)</u>

Source : Spanos Depreciation Study, Page III-4.

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-037**

**REQUEST:**

37. Please provide the Company's capital budget for the next five years. Please identify all retirements, replacements, new additions and cost of removal reflected in this budget. Please provide by account where available and explain how the cost estimates are derived for these items.

**RESPONSE:**

See Attachment KyAG-DR-01-037(a) and (b). A discussion of the Gas Operations capital budgeting process can be found in the testimony of Gary J. Hebbeler on pages 8-10.

**WITNESS RESPONSIBLE:** Gary J. Hebbeler



**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-059**

**REQUEST:**

59. Please provide a narrative explanation of a typical Main and Service replacement project.

**RESPONSE:**

The Accelerated Main Replacement Program is a 10 year program designed to replace 12-inch and small diameter cast iron and unprotected bare steel gas mains within ULH&P's distribution system. Associated with the main replacement, services from main to curb will be replaced and all metallic curb to meter services. Mains are selected for replacement based on 9 priorities. The priorities were established based on leak history, break history, operating pressure, jointing methods and age.

Projects are referred to as modules and are generally 2 – 5 miles in length. Each module is designed and permitted to the appropriate governing agency. Request for bids are sent to between 7 and 9 Cinergy approved contractors. Once the bids are awarded, a pre-construction meeting is held with the permitting agencies and residents are notified of the planned construction. Periodically, during the construction process, an on-site meeting is held with the appropriate permitting agency to cover any unforeseen changes to the construction schedule.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

# **Union Light, Heat & Power Co**

## **276.3 - Mains - Plastic**

**KyPSC Staff Second Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 5, 2005**  
**Response Due Date: April 19, 2005**

**KyPSC-DR-02-015**

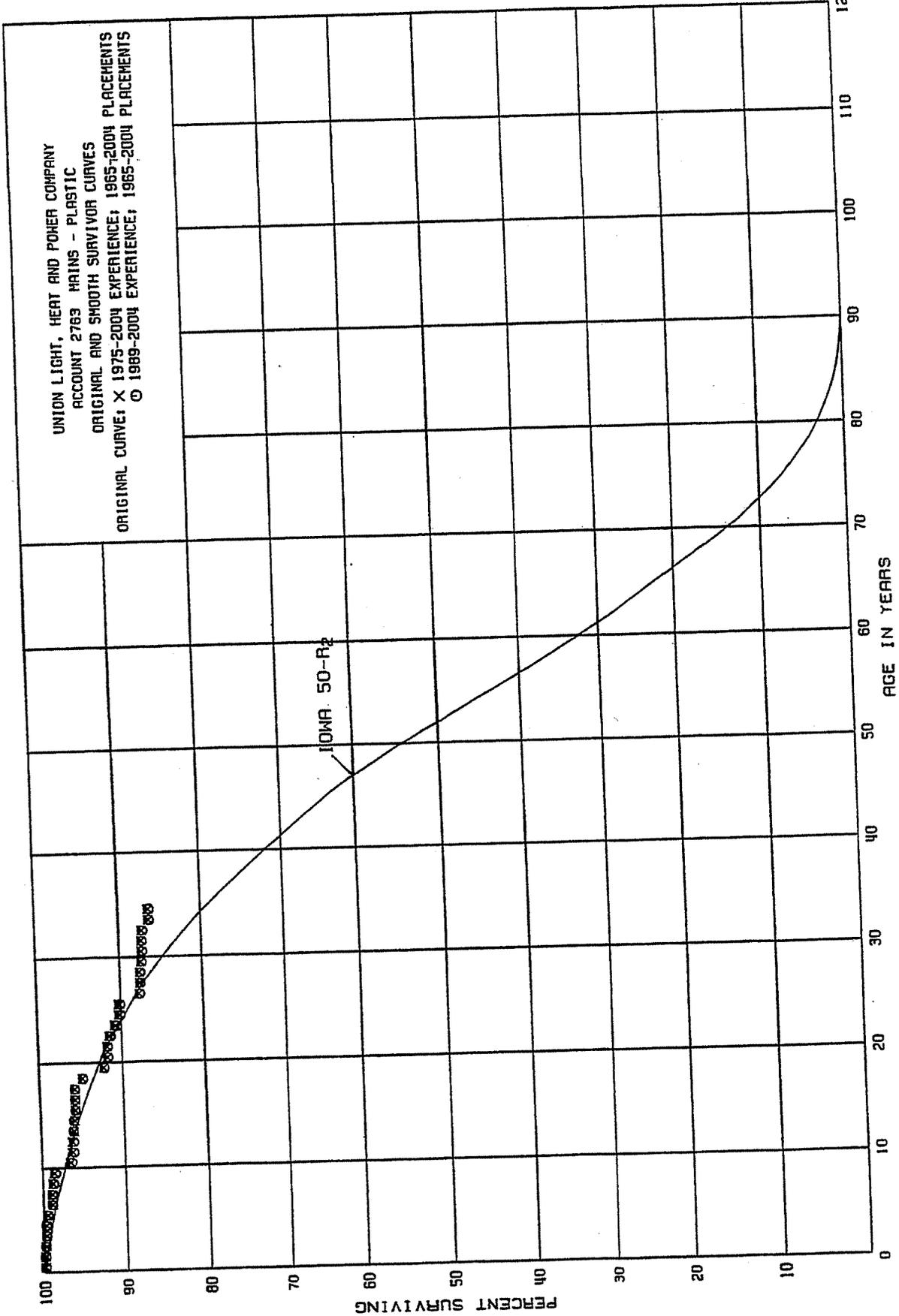
**REQUEST:**

15. Refer to the Application, Tab 34, page III-37. Concerning Account 2763, Mains - Plastic, the proposed remaining life of 36.3 years appears to be conservative and the resulting depreciation rate of 2.97 percent appears to be high.
- a. Does ULH&P consider Iowa curve 50-R2 to be the best match for this account? Explain the response.
  - b. Would ULH&P agree that the estimated service life for this account is relatively short? Explain the response.
  - c. Indicate whether an Iowa curve that provides a better match for this account exists and provide a copy of that curve.

**RESPONSE:**

- a. Based on all the factors considered in determining an Iowa curve for this account, it is my judgment that the 50-R2 best represents the life characteristics for Account 2763. The estimate for this account was determined on many factors beyond just statistics.
- b. No, I would not agree that the estimated service life for this account is relatively short. As shown by the life table, plastic mains have only been in existence for 39 years; therefore, estimating a 50-year average of assets that have only 39 years of existence requires judgment. Given the available historical analysis and expectations of service life for plastic main, the 50-R2 is a reasonable estimate.
- c. It is possible to fit other curves to the statistical data through 2004; however, I feel the 50-R2 is the best estimate considering all factors relating to retirement.

**WITNESS RESPONSIBLE: John J. Spanos**

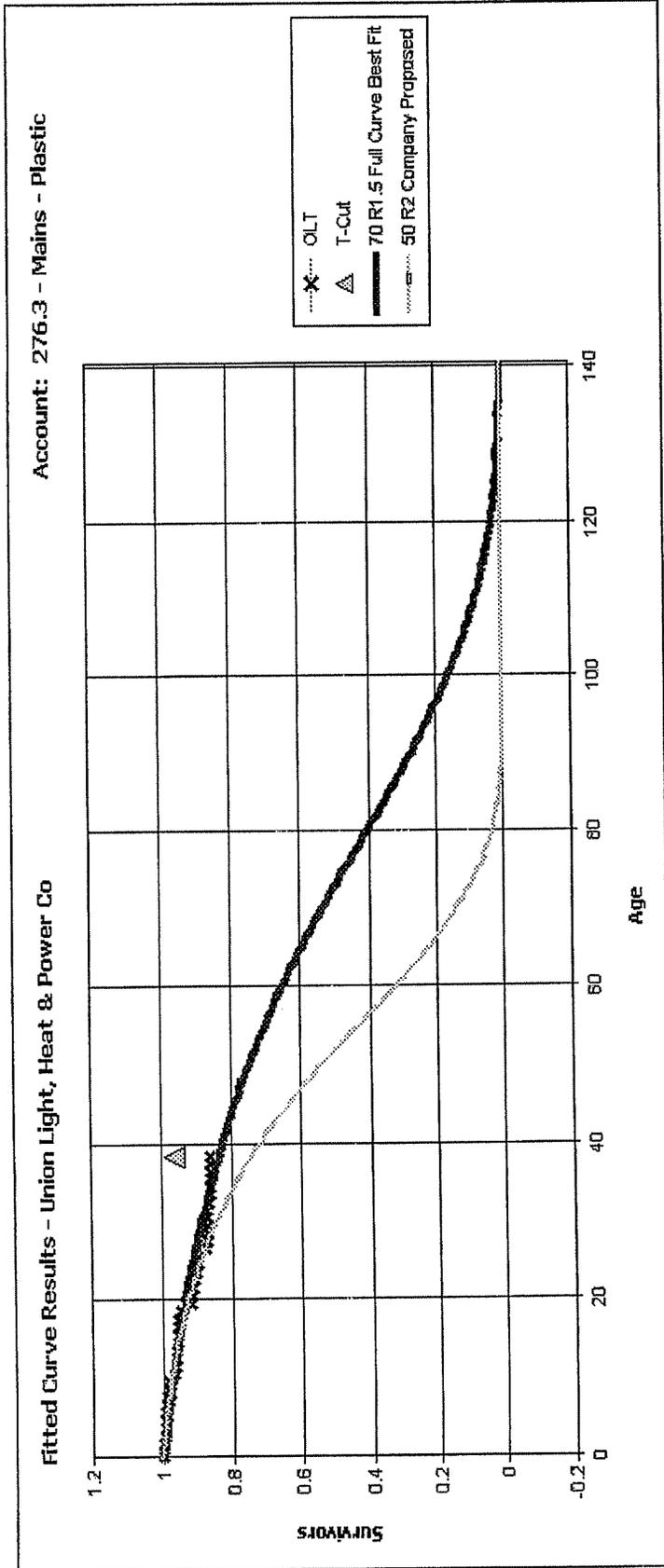


**Best Fit Curve Results**  
**Union Light, Heat & Power Co**  
**Account: 276.3 - Mains - Plastic**

Curve	Life	Sum of Squared Differences
<b>BAND</b>	<b>1975 - 2004</b>	
R1.5	70.0	10,054.021
R1	80.0	10,074.858
R2	60.0	10,081.991
S0.5	68.0	10,097.746
L1	77.0	10,108.706
R2.5	54.0	10,149.164
L1.5	68.0	10,163.982
L0.5	80.0	10,195.203
S1	61.0	10,203.686
S1.5	56.0	10,299.183
R3	50.0	10,308.363
S-0.5	80.0	10,319.987
L2	61.0	10,328.915
R0.5	80.0	10,464.643
S2	52.0	10,490.942
L3	52.0	10,638.181
R4	45.0	10,718.321
L0	80.0	10,825.806
S3	48.0	10,856.897
L4	46.0	10,950.538
O1	80.0	11,348.391
S4	44.0	11,363.853
R5	42.0	11,427.809
L5	43.0	11,465.330
S5	42.0	11,814.614
S6	41.0	12,170.360
O2	80.0	12,243.983
SQ	39.0	12,810.032
O3	80.0	17,674.494
O4	80.0	27,130.943
S0	10.0	340,178.032

**Analytical Parameters**

OLT Placement Band: 1965 - 2004  
 OLT Experience Band: 1975 - 2004  
 Minimum Life Parameter: 10  
 Maximum Life Parameter: 80  
 Life Increment Parameter: 1  
 Max Age (T-Cut): 38.5



**Analytical Parameters**

OLT Placement Band:	1965 - 2004
OLT Experience Band:	1975 - 2004
Minimum Life Parameter:	10
Maximum Life Parameter:	80
Life Increment Parameter:	1
Max Age (T-Cut):	38.5

**Observed Life Table Results  
Union Light, Heat & Power Co  
Account: 276.3 - Mains - Plastic**

Age	Exposures	Retirement	Retirement Ratio (%)	Survivor Ratio (%)	Cumulative Survivors
<b>BAND</b>		<b>1975 - 2004</b>			
0	42,510,750	0	0.0000	100.0000	1.0000
0.5	38,150,879	13,350	0.0003	99.9997	1.0000
1.5	23,151,920	74,630	0.0032	99.9968	0.9997
2.5	33,527,696	17,523	0.0005	99.9995	0.9976
3.5	29,784,505	9,214	0.0003	99.9997	0.9971
4.5	26,778,717	45,447	0.0017	99.9983	0.9968
5.5	24,189,044	144,784	0.0060	99.9940	0.9957
6.5	20,546,527	3,439	0.0002	99.9998	0.9891
7.5	16,209,971	23,334	0.0014	99.9986	0.9889
8.5	12,602,889	24,190	0.0019	99.9981	0.9875
9.5	9,482,049	180,549	0.0190	99.9810	0.9856
10.5	5,440,238	19,019	0.0035	99.9965	0.9669
11.5	3,003,597	35	0.0000	100.0000	0.9635
12.5	1,742,578	5,024	0.0029	99.9971	0.9635
13.5	1,565,168	864	0.0006	99.9994	0.9607
14.5	1,505,014	1,342	0.0009	99.9991	0.9601
15.5	1,417,938	388	0.0003	99.9997	0.9592
16.5	1,405,436	377	0.0003	99.9997	0.9589
17.5	1,345,718	13,025	0.0097	99.9903	0.9586
18.5	1,304,784	38,883	0.0298	99.9702	0.9493
19.5	1,265,902	7,265	0.0057	99.9943	0.9210
20.5	1,218,069	0	0.0000	100.0000	0.9158
21.5	1,208,412	3,983	0.0033	99.9967	0.9158
22.5	1,204,429	9,049	0.0075	99.9925	0.9128
23.5	1,159,302	6,280	0.0054	99.9946	0.9060
24.5	984,401	68	0.0001	99.9999	0.9011
25.5	883,408	25,474	0.0288	99.9712	0.9010
26.5	797,581	952	0.0012	99.9988	0.8751
27.5	787,300	234	0.0003	99.9997	0.8740
28.5	758,018	1,411	0.0019	99.9981	0.8737
29.5	688,967	875	0.0013	99.9987	0.8720
30.5	598,116	0	0.0000	100.0000	0.8709
31.5	478,590	430	0.0009	99.9991	0.8709
32.5	296,262	2,797	0.0094	99.9906	0.8701
33.5	113,283	0	0.0000	100.0000	0.8619
34.5	7,912	0	0.0000	100.0000	0.8619
35.5	7,912	0	0.0000	100.0000	0.8619
36.5	1,139	0	0.0000	100.0000	0.8619
37.5	1,139	0	0.0000	100.0000	0.8619
38.5	1,139	135	0.1184	99.8816	0.8619

1/ Company Provided Exposures and Retirements

Union Light, Heat and Power Co.

276.3 - Mains - Plastic

Calculation of Remaining Life  
Based Upon Broad Group/Vintage Group Life Group Procedures  
Related to Original Cost as of December 31, 2004

Survivor Curve .. IOWA:		70	R1.5			
Year (1)	Age (2)	Surviving Investment (3)	ELG Average		ASL Weights (6)=(3)/(4)	RL Weights (7)=(6)*(5)
			Service Life (4)	Remaining Life (5)		
2004	0.5	4,473,857	39.55	39.05	113,130	4,417,292
2003	1.5	3,106,096	43.90	42.40	70,747	2,999,975
2002	2.5	1,739,768	46.49	43.99	37,420	1,646,218
2001	3.5	3,963,310	48.41	44.91	81,868	3,676,773
2000	4.5	3,432,645	49.98	45.48	68,683	3,123,570
1999	5.5	2,214,225	51.32	45.82	43,148	1,976,912
1998	6.5	3,505,324	52.50	46.00	66,763	3,071,365
1997	7.5	4,333,118	53.58	46.08	80,877	3,726,543
1996	8.5	3,583,748	54.56	46.06	65,682	3,025,453
1995	9.5	3,098,607	55.48	45.98	55,851	2,568,024
1994	10.5	3,861,262	56.34	45.84	68,535	3,141,644
1993	11.5	2,417,622	57.16	45.66	42,298	1,931,191
1992	12.5	1,260,984	57.93	45.43	21,767	988,902
1991	13.5	172,386	58.68	45.18	2,938	132,724
1990	14.5	59,290	59.39	44.89	998	44,815
1989	15.5	85,734	60.08	44.58	1,427	63,616
1988	16.5	12,114	60.75	44.25	199	8,824
1987	17.5	59,341	61.40	43.90	967	42,427
1986	18.5	27,909	62.03	43.53	450	19,585
1985	19.5	0	62.65	43.15	0	0
1984	20.5	40,568	63.25	42.75	641	27,419
1983	21.5	9,657	63.84	42.34	151	6,404
1982	22.5	0	64.42	41.92	0	0
1981	23.5	36,079	64.99	41.49	555	23,033
1980	24.5	168,621	65.55	41.05	2,572	105,598
1979	25.5	100,924	66.11	40.61	1,527	61,993
1978	26.5	60,353	66.65	40.15	905	36,357
1977	27.5	9,330	67.19	39.69	139	5,511
1976	28.5	29,048	67.73	39.23	429	16,824
1975	29.5	67,640	68.26	38.76	991	38,407
1974	30.5	89,975	68.78	38.28	1,308	50,079
1973	31.5	119,527	69.31	37.81	1,725	65,202
1972	32.5	181,897	69.83	37.33	2,605	97,237
1971	33.5	180,182	70.34	36.84	2,561	94,375

Union Light, Heat and Power Co.

276.3 - Mains - Plastic

Calculation of Remaining Life  
Based Upon Broad Group/Vintage Group Life Group Procedures  
Related to Original Cost as of December 31, 2004

Survivor Curve .. IOWA: 70 R1.5

<u>Year</u> (1)	<u>Age</u> (2)	<u>Surviving</u> <u>Investment</u> (3)	<u>ELG Average</u>		<u>ASL</u> <u>Weights</u> (6)=(3)/(4)	<u>RL</u> <u>Weights</u> (7)=(6)*(5)
			<u>Service</u> <u>Life</u> (4)	<u>Remaining</u> <u>Life</u> (5)		
1970	34.5	105,371	70.86	36.36	1,487	54,069
1969	35.5	0	71.37	35.87	0	0
1968	36.5	6,773	71.89	35.39	94	3,334
1967	37.5	0	72.40	34.90	0	0
1966	38.5	0	72.91	34.41	0	0
1965	39.5	1,139	73.42	33.92	16	526
		42,614,425			841,453	37,292,223
AVERAGE SERVICE LIFE						50.6
AVERAGE REMAINING LIFE						44.3

# **Union Light, Heat and Power Company**

## **276 - Mains - Net Salvage**

UNION LIGHT, HEAT AND POWER COMPANY

ACCOUNT 2760 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1980	297,448	63,990	22	226,938	76	162,948	55
1981	96,963	31,862	33	137-	0	31,999-	33-
1982	101,423	42,201	42	87,935	87	45,734	45
1983	56,366	50,631	90	175,712	312	125,081	222
1984	69,904	27,581	39	21,909	31	5,672-	8-
1985	99,714	27,067	27	126,424	127	99,357	100
1986	162,431	47,728	29	15,840	10	31,888-	20-
1987	208,624	47,610	23	9,107	4	38,503-	18-
1988	74,281	62,808	85	199,126	268	136,318	184
1989	144,904	152,404	105	215,651	149	63,247	44
1990	374,020	257,462	69	92,061	25	165,401-	44-
1991	325,319	210,093	65	1,374	0	208,719-	64-
1992	309,776	229,016	74	43,084-	14-	272,100-	88-
1993	401,462	57,958	14	655,817	163	597,859	149
1994	145,620	43,617	30	17,369	12	26,248-	18-
1995	169,197	80,946	48	159,250	94	78,304	46
1996	379,558	70,301	19	7,734	2	62,567-	16-
1997	280,831	82,481	29	20,990	7	61,491-	22-
1998	120,612	129,207	107	5,348	4	123,859-	103-
1999	478,119	97,369	20	14,793	3	82,576-	17-
2000	309,772	31,208-	10-	2,048	1	33,256	11
2001	951,780	380,571	40	342	0	380,229-	40-
2002	911,154	263,744	29		0	263,744-	29-
2003	496,164	74,211-	15-		0	74,211	15
TOTAL	6,965,442	2,351,228	34	2,012,547	29	338,681-	5-

THREE-YEAR MOVING AVERAGES

80-82	165,278	46,018	28	104,912	63	58,894	36
81-83	84,917	41,565	49	87,837	103	46,272	54
82-84	75,898	40,138	53	95,185	125	55,047	73
83-85	75,328	35,093	47	108,015	143	72,922	97
84-86	110,683	34,125	31	54,724	49	20,599	19
85-87	156,923	40,802	26	50,457	32	9,655	6
86-88	148,445	52,715	36	74,691	50	21,976	15
87-89	142,603	87,607	61	141,295	99	53,688	38
88-90	197,735	157,558	80	168,946	85	11,388	6
89-91	281,414	206,653	73	103,029	37	103,624-	37-
90-92	336,371	232,190	69	16,784	5	215,406-	64-
91-93	345,519	165,689	48	204,702	59	39,013	11

UNION LIGHT, HEAT AND POWER COMPANY

ACCOUNT 2760 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT PCT	GROSS SALVAGE AMOUNT PCT	NET SALVAGE AMOUNT PCT
<b>THREE-YEAR MOVING AVERAGES</b>				
92-94	285,619	110,197 39	210,034 74	99,837 35
93-95	238,760	60,840 25	277,479 116	216,639 91
94-96	231,458	64,955 28	61,451 27	3,504- 2-
95-97	276,528	77,909 28	62,658 23	15,251- 6-
96-98	260,333	93,996 36	11,357 4	82,639- 32-
97-99	293,187	103,019 35	13,710 5	89,309- 30-
98-00	302,834	65,123 22	7,396 2	57,727- 19-
99-01	579,890	148,911 26	5,728 1	143,183- 25-
00-02	724,235	204,369 28	797 0	203,572- 28-
01-03	786,366	190,034 24	114 0	189,920- 24-
<b>FIVE-YEAR AVERAGE</b>				
99-03	629,398	127,253 20	3,437 1	123,816- 20-

- 20

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-030**

**REQUEST:**

30. Please explain the Company's procedures for gross salvage and cost of removal. Also, please explain how cost of removal relating to replacements is allocated between cost of removal and new additions. Provide copies of actual source documents showing this allocation.

**RESPONSE:**

ULH&P does not physically remove retired mains or services. Mains are purged and capped when removed from service. At the time the new main is tied into the existing system, Union Light charges 75% of the tie-in costs to the new main. The remaining 25% of the cost is applied to cost of removal.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-032**

**REQUEST:**

32. Please identify and explain the Company's expectations with respect to future removal requirements and markets for retired equipment and materials. Please provide the basis for these expectations.

**RESPONSE:**

Union Light does not physically remove retired mains or services. Mains are purged and capped when removed from service.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-036**

**REQUEST:**

36. Do ULH&P's net salvage estimates for mass property accounts incorporate inflation expected to be incurred in the future? If yes, provide the net present value of all of these ratios.

**RESPONSE:**

The ULH&P net salvage estimates for mass property accounts do not incorporate expected inflation to be incurred in the future. However, cost of removal is directly related to labor which is expected to grow at a rate similar to the national cost of living rates.

**WITNESS RESPONSIBLE: John J. Spanos**

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-053**

**REQUEST:**

53. Please provide all manuals, guidelines, memoranda or other documentation that deals with the Company's policies with regard to the physical removal of retired mains and, separately, services from the ground as opposed to capping these pipes and leaving them in place.

**RESPONSE:**

Union Light does not physically remove retired mains or services. Mains are purged and capped when removed from service.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-054**

**REQUEST:**

54. Please explain the process by which the labor associated with Mains and Services replacement projects is split between the new asset and cost of removal.

**RESPONSE:**

Construction & Maintenance division is tying the new mains into the system. At the time the new main is tied into the existing system, Union Light charges 75% of the tie-in costs to the new main. The remaining 25% of the cost is applied to cost of removal. There is no cost of removal applied to main to curb services.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**KyPSC Staff Third Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: May 10, 2005**  
**Response Due Date: May 24, 2005**

**KyPSC-DR-03-052**

**REQUEST:**

52. Refer to the response to the AG's First Request, Items 53 and 54.
- a. What is the average estimated cost for purging and capping a retired main? Include all assumptions and calculations used to determine the response.
  - b. Provide the average estimated cost for purging and capping a retired main as a percentage of ULH&P's average installation costs.
  - c. Explain in detail the basis for the 75/25 allocation of tie-in costs. Include all documentation supporting the allocation percentages.
  - d. Explain why any portion of the new mains tie-in costs should be applied as a cost of removal for the old main. Include in this response a discussion of why the removal costs should only reflect the cost of purging and capping a retired main.

**RESPONSE:**

- a. The average cost associated with abandoning a main which includes excavation, restoration, purging and capping a retired main is \$866.05 per tie-in. The following methodology was used to arrive at the above mentioned average. Take the cost of removal for AMRP projects for 2004 (\$112,586) divided by the number of tie-ins completed on the existing system for AMRP projects in 2004 (130).
- b. The average cost given above is per tie-in. The average cost for installation of main is by foot. Therefore, a conversion must be made to provide the cost for purging and capping a retired main as a percentage of the average installation cost. Therefore, take the total cost of removal (\$112,586) divided by the total footage installed in 2004 (103,936) yields \$1.08/foot. The average cost to install a foot of AMRP main in 2004 was \$50.61. Therefore, the average cost for purging and capping a retired main as a percent of ULH&P's average installation cost is 2.1%.
- c. In the beginning of the AMRP project, we found inconsistencies in charges for tie-in crews for installation versus abandonment. In an effort to maintain consistency, observations were made in the field by the supervisors. These supervisors came to a consensus for the split by percentage for installation and cost of removal. These percentages may change year to year depending on work location and type.
- d. The process for completing a tie-in is as follows: The tie-in hole is excavated, shore if necessary, new main tied-in, old main capped and

purged, tie-in hole backfilled and restoration performed. Therefore, the cost of removal charges are accumulated by the same crew during the same operation as the tie-in cost. Included in the cost of removal is a portion of the excavation, backfilling and restoration as well as the purging and capping of the abandon main.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Attorney General First Set Data Requests  
ULH&P Case No. 2005-00042  
Date Received: April 6, 2005  
Response Due Date: April 19, 2005**

**AG-DR-01-059**

**REQUEST:**

- 59. Please provide a narrative explanation of a typical Main and Service replacement project.

**RESPONSE:**

The Accelerated Main Replacement Program is a 10 year program designed to replace 12-inch and small diameter cast iron and unprotected bare steel gas mains within ULH&P's distribution system. Associated with the main replacement, services from main to curb will be replaced and all metallic curb to meter services. Mains are selected for replacement based on 9 priorities. The priorities were established based on leak history, break history, operating pressure, jointing methods and age.

Projects are referred to as modules and are generally 2 - 5 miles in length. Each module is designed and permitted to the appropriate governing agency. Request for bids are sent to between 7 and 9 Cinergy approved contractors. Once the bids are awarded, a pre-construction meeting is held with the permitting agencies and residents are notified of the planned construction. Periodically, during the construction process, an on-site meeting is held with the appropriate permitting agency to cover any unforeseen changes to the construction schedule.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Attorney General Second Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: May 6, 2005**  
**Response Due Date: May 24, 2005**

**AG-DR-02-035**

**REQUEST:**

35. Follow-up to AG-DR-01-054. The response states that there is no cost of removal applied to main to curb services. However, page III-101 of the depreciation study shows cost of removal expenditures for this account. How was the actual cost of removal experienced, as shown on that page, calculated?

**RESPONSE:**

The cost of removal expenditures in the account shown are for individual main-to-curb services associated with services abandoned and not renewed. The majority of these types of instances are due to dwellings being razed. Question AG-DR-01-054 specifically states replacement projects. There is no cost of removal applied to main-to-curb services on replacement projects.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Attorney General Second Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: May 6, 2005**  
**Response Due Date: May 24, 2005**

**AG-DR-02-037**

**REQUEST:**

37. Follow-up to AG-DR-01-030. Please provide sample work orders showing this allocation and the internal policy and procedure documents describing this procedure.

**RESPONSE:**

The work order form does not contain a space for the allocation requested. The 75%--25% allocation is a guideline that has been verbally communicated to field personnel.

**WITNESS RESPONSIBLE:** Gary J. Hebbeler

**Union Light, Heat and Power Company**  
**280 - Services - Net Salvage**

UNION LIGHT, HEAT AND POWER COMPANY

ACCOUNT 2800 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1980	135,656	50,083	37	18,509	14	31,574-	23-
1981	302,302	62,979	21	37,075	12	25,904-	9-
1982	149,937	64,940	43	43,970	29	20,970-	14-
1983	238,055	76,514	32	24,929	10	51,585-	22-
1984	112,911	65,364	58	39,679	35	25,685-	23-
1985	106,308	64,400	61	21,039	20	43,361-	41-
1986	140,701	80,731	57	20,432	15	60,299-	43-
1987	147,848	74,281	50	30,561	21	43,720-	30-
1988	157,350	143,746	91	25,861	16	117,885-	75-
1989	186,402	84,688	45	22,024	12	62,664-	34-
1990	265,841	97,991	37	37,664	14	60,327-	23-
1991	204,646	113,540	55	36,078	18	77,462-	38-
1992	217,280	73,083	34	11,764	5	61,319-	28-
1993	166,165	82,826	50	15,233	9	67,593-	41-
1994	164,178	68,270	42	15,698	10	52,572-	32-
1995	223,270	70,646	32	20,634	9	50,012-	22-
1996	218,739	84,035	38	24,112	11	59,923-	27-
1997	172,654	62,567	36	17,057	10	45,510-	26-
1998	285,837	127,759	45	9,132	3	118,627-	42-
1999	390,999	136,649	35	39,352	10	97,297-	25-
2000							0
2001	298,851		0		0		
2002	748,583	180,819	24		0	180,819-	24-
2003	751,729	491,114	65	2,439	0	488,675-	65-
TOTAL	5,786,242	2,357,025	41	513,242	9	1,843,783-	32-

THREE-YEAR MOVING AVERAGES

80-82	195,965	59,334	30	33,185	17	26,149-	13-
81-83	230,098	68,144	30	35,325	15	32,819-	14-
82-84	166,968	68,939	41	36,193	22	32,746-	20-
83-85	152,425	68,759	45	28,549	19	40,210-	26-
84-86	119,973	70,165	58	27,050	23	43,115-	36-
85-87	131,619	73,137	56	24,011	18	49,126-	37-
86-88	148,633	99,586	67	25,618	17	73,968-	50-
87-89	163,867	100,905	62	26,149	16	74,756-	46-
88-90	203,198	108,809	54	28,516	14	80,293-	40-
89-91	218,963	98,740	45	31,922	15	66,818-	31-
90-92	229,256	94,871	41	28,502	12	66,369-	29-
91-93	196,030	89,816	46	21,025	11	68,791-	35-

UNION LIGHT, HEAT AND POWER COMPANY

ACCOUNT 2800 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
<b>THREE-YEAR MOVING AVERAGES</b>							
92-94	182,541	74,727	41	14,232	8	60,495-	33-
93-95	184,538	73,914	40	17,188	9	56,726-	31-
94-96	202,062	74,317	37	20,148	10	54,169-	27-
95-97	204,888	72,416	35	20,601	10	51,815-	25-
96-98	225,743	91,454	41	16,767	7	74,687-	33-
97-99	283,163	108,992	38	21,847	8	87,145-	31-
98-00	225,612	88,136	39	16,161	7	71,975-	32-
99-01	229,950	45,550	20	13,117	6	32,433-	14-
00-02	349,145	60,273	17		0	60,273-	17-
01-03	599,721	223,978	37	813	0	223,165-	37-
<b>FIVE-YEAR AVERAGE</b>							
99-03	438,032	161,716	37	8,358	2	153,358-	35-

- 35

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-030**

**REQUEST:**

30. Please explain the Company's procedures for gross salvage and cost of removal. Also, please explain how cost of removal relating to replacements is allocated between cost of removal and new additions. Provide copies of actual source documents showing this allocation.

**RESPONSE:**

ULH&P does not physically remove retired mains or services. Mains are purged and capped when removed from service. At the time the new main is tied into the existing system, Union Light charges 75% of the tie-in costs to the new main. The remaining 25% of the cost is applied to cost of removal.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-032**

**REQUEST:**

32. Please identify and explain the Company's expectations with respect to future removal requirements and markets for retired equipment and materials. Please provide the basis for these expectations.

**RESPONSE:**

Union Light does not physically remove retired mains or services. Mains are purged and capped when removed from service.

**WITNESS RESPONSIBLE:** Gary J. Hebbeler

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-036**

**REQUEST:**

36. Do ULH&P's net salvage estimates for mass property accounts incorporate inflation expected to be incurred in the future? If yes, provide the net present value of all of these ratios.

**RESPONSE:**

The ULH&P net salvage estimates for mass property accounts do not incorporate expected inflation to be incurred in the future. However, cost of removal is directly related to labor which is expected to grow at a rate similar to the national cost of living rates.

**WITNESS RESPONSIBLE: John J. Spanos**

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-053**

**REQUEST:**

53. Please provide all manuals, guidelines, memoranda or other documentation that deals with the Company's policies with regard to the physical removal of retired mains and, separately, services from the ground as opposed to capping these pipes and leaving them in place.

**RESPONSE:**

Union Light does not physically remove retired mains or services. Mains are purged and capped when removed from service.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-054**

**REQUEST:**

54. Please explain the process by which the labor associated with Mains and Services replacement projects is split between the new asset and cost of removal.

**RESPONSE:**

Construction & Maintenance division is tying the new mains into the system. At the time the new main is tied into the existing system, Union Light charges 75% of the tie-in costs to the new main. The remaining 25% of the cost is applied to cost of removal. There is no cost of removal applied to main to curb services.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**KyPSC Staff Third Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: May 10, 2005**  
**Response Due Date: May 24, 2005**

**KyPSC-DR-03-052**

**REQUEST:**

52. Refer to the response to the AG's First Request, Items 53 and 54.
- a. What is the average estimated cost for purging and capping a retired main? Include all assumptions and calculations used to determine the response.
  - b. Provide the average estimated cost for purging and capping a retired main as a percentage of ULH&P's average installation costs.
  - c. Explain in detail the basis for the 75/25 allocation of tie-in costs. Include all documentation supporting the allocation percentages.
  - d. Explain why any portion of the new mains tie-in costs should be applied as a cost of removal for the old main. Include in this response a discussion of why the removal costs should only reflect the cost of purging and capping a retired main.

**RESPONSE:**

- a. The average cost associated with abandoning a main which includes excavation, restoration, purging and capping a retired main is \$866.05 per tie-in. The following methodology was used to arrive at the above mentioned average. Take the cost of removal for AMRP projects for 2004 (\$112,586) divided by the number of tie-ins completed on the existing system for AMRP projects in 2004 (130).
- b. The average cost given above is per tie-in. The average cost for installation of main is by foot. Therefore, a conversion must be made to provide the cost for purging and capping a retired main as a percentage of the average installation cost. Therefore, take the total cost of removal (\$112,586) divided by the total footage installed in 2004 (103,936) yields \$1.08/foot. The average cost to install a foot of AMRP main in 2004 was \$50.61. Therefore, the average cost for purging and capping a retired main as a percent of ULH&P's average installation cost is 2.1%.
- c. In the beginning of the AMRP project, we found inconsistencies in charges for tie-in crews for installation versus abandonment. In an effort to maintain consistency, observations were made in the field by the supervisors. These supervisors came to a consensus for the split by percentage for installation and cost of removal. These percentages may change year to year depending on work location and type.
- d. The process for completing a tie-in is as follows: The tie-in hole is excavated, shore if necessary, new main tied-in, old main capped and

purged, tie-in hole backfilled and restoration performed. Therefore, the cost of removal charges are accumulated by the same crew during the same operation as the tie-in cost. Included in the cost of removal is a portion of the excavation, backfilling and restoration as well as the purging and capping of the abandon main.

**WITNESS RESPONSIBLE:** Gary J. Hebbeler

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-059**

**REQUEST:**

59. Please provide a narrative explanation of a typical Main and Service replacement project.

**RESPONSE:**

The Accelerated Main Replacement Program is a 10 year program designed to replace 12-inch and small diameter cast iron and unprotected bare steel gas mains within ULH&P's distribution system. Associated with the main replacement, services from main to curb will be replaced and all metallic curb to meter services. Mains are selected for replacement based on 9 priorities. The priorities were established based on leak history, break history, operating pressure, jointing methods and age.

Projects are referred to as modules and are generally 2 - 5 miles in length. Each module is designed and permitted to the appropriate governing agency. Request for bids are sent to between 7 and 9 Cinergy approved contractors. Once the bids are awarded, a pre-construction meeting is held with the permitting agencies and residents are notified of the planned construction. Periodically, during the construction process, an on-site meeting is held with the appropriate permitting agency to cover any unforeseen changes to the construction schedule.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Attorney General Second Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: May 6, 2005**  
**Response Due Date: May 24, 2005**

**AG-DR-02-035**

**REQUEST:**

35. Follow-up to AG-DR-01-054. The response states that there is no cost of removal applied to main to curb services. However, page III-101 of the depreciation study shows cost of removal expenditures for this account. How was the actual cost of removal experienced, as shown on that page, calculated?

**RESPONSE:**

The cost of removal expenditures in the account shown are for individual main-to-curb services associated with services abandoned and not renewed. The majority of these types of instances are due to dwellings being razed. Question AG-DR-01-054 specifically states replacement projects. There is no cost of removal applied to main-to-curb services on replacement projects.

**WITNESS RESPONSIBLE:** Gary J. Hebbeler

**Attorney General Second Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: May 6, 2005**  
**Response Due Date: May 24, 2005**

**AG-DR-02-037**

**REQUEST:**

37. Follow-up to AG-DR-01-030. Please provide sample work orders showing this allocation and the internal policy and procedure documents describing this procedure.

**RESPONSE:**

The work order form does not contain a space for the allocation requested. The 75%--25% allocation is a guideline that has been verbally communicated to field personnel.

**WITNESS RESPONSIBLE: Gary J. Hebbeler**

**Union Light, Heat and Power Company**  
**Estimated Rates and Accruals**  
**Snavely King Recommendations - Combined Rates**  
**As of September 30, 2004**

Account	(1)	(2)	(3)	(4)	(5)=(2)-(3)-(2)*(4)	(6)	(7)	(8)=(5)/(7)	(9)=(8)/(2)
		Original Cost	Book Reserve	Net Salvage	Future Accruals	Survivor Curve	R.L.	Annual Accrual Amount	Annual Accrual Rate
<b>Common Plant</b>									
190.00 Structures & Improvements									
Florence Service Building		4,725,458	1,256,998	0	3,468,460	100-R1.5	32.7	105,911	2.24
Covington Office Building (Sold)		1,548,747	820,835	47	-	100-R1.5	-	-	-
Kentucky Services Building		1,694,442	1,180,267	0	514,175	100-R1.5	7.6	67,313	3.97
Minor Structures		7,832	821	(5)	7,402	40-R3	31.9	232	2.96
Total Structures & Improvements		<u>7,976,479</u>	<u>3,258,921</u>		<u>3,990,037</u>			<u>173,456</u>	<u>2.17</u>
191.00 Office Furniture & Equipment		705,033	454,928	0	250,105	20-SQ	5.5	45,739	6.49
191.10 Office Furniture & Equipment - EDP Equip.		12,981	12,981	0	0	5-SQ	-	-	-
192.00 Autos and Trucks		5,078	5,078	5	(254)	9-R3	-	-	-
193.00 Stores and Equipment		5,563	(20,219)	0	25,782	20-SQ	9.8	2,644	47.53
194.00 Tools, Shop and Garage Equipment		169,528	90,673	0	78,855	25-SQ	9.7	8,124	4.79
197.00 Communication Equipment		62,935	14,250	0	48,685	15-SQ	10.7	4,529	7.20
198.00 Miscellaneous Equipment		14,910	13,740	0	1,170	20-SQ	3.8	312	2.09
<b>Total Common Plant</b>		<b>8,952,508</b>	<b>3,830,352</b>		<b>4,394,381</b>		<b>18.7</b>	<b>234,804</b>	<b>2.62</b>
<b>Production Plant</b>									
204.10 Rights of Way		24,439	24,439	0	-	50-SQ	-	-	-
205.00 Structures & Improvements		1,554,581	1,376,110	(5)	256,200	83-R4	44.4	5,770	0.37
211.00 Liquid Petroleum Gas Equipment		3,619,035	1,701,674	(5)	2,098,313	59-S1.5	37.6	55,806	1.54
<b>Total Production Plant</b>		<b>5,198,055</b>	<b>3,102,223</b>		<b>2,354,513</b>		<b>38.2</b>	<b>61,576</b>	<b>1.18</b>
<b>Distribution Plant</b>									
274.10 Rights of Way - General		1,020,156	442,998	0	577,158	100-R4	70.4	8,198	0.80
275.00 Structures & Improvements - General		157,012	119,932	(10)	52,781	50-R2.5	30.1	1,755	1.12
Mains									
276.10 Cast Iron, Copper and All Valves		2,535,274	2,366,404	0	168,870	6 RL	6.0	28,145	1.11
276.20 Steel		85,376,092	34,835,929	(5)	54,808,968	53-R2	31.0	1,768,031	2.07
276.30 Plastic		63,062,653	7,542,097	(5)	58,673,689	70-R1.5	44.3	1,324,463	2.10
Total Mains		<u>150,974,019</u>	<u>44,744,430</u>		<u>113,651,527</u>			<u>3,120,639</u>	<u>2.07</u>
278.00 M&R - General - System - Excl. Elect. Equip.		2,711,732	1,510,535	(5)	1,336,784	40-R1	23.7	56,445	2.08
278.10 M&R - General - System - Elect. Equip.		389,078	354,314	(5)	54,217	15-S2.5	10.0	5,414	1.39
278.20 Measuring & Regulating - General - District		635,340	512,847	(75)	598,998	50-R2	25.4	23,573	3.71
Services									
280.10 Cast Iron, Copper and Valves		2,663,011	3,274,800	0	(611,789)	6 RL	6.0	(101,965)	(3.83)

**Union Light, Heat and Power Company**  
**Estimated Rates and Accruals**  
**Snavely King Recommendations - Combined Rates**  
**As of September 30, 2004**

<u>Account</u>	<u>Original Cost</u> (2)	<u>Book Reserve</u> (3)	<u>Net Salvage</u> (4)	<u>Future Accruals</u> (5)=(2)-(3)-(4)	<u>Survivor Curve</u> (6)	<u>R.L.</u> (7)	<u>Annual Accrual Amount</u> (8)=(5)/(7)	<u>Annual Accrual Rate</u> (9)=(8)/(2)
280.20 Steel	3,241,998	2,438,396	(5)	3/ 965,702	38-R1	22.1	43,697	1.35
280.30 Plastic	59,458,831	19,832,401	(5)	3/ 42,599,372	42-R1.5	25.6	1,664,038	2.80
<b>Total Services</b>	<b>65,363,841</b>	<b>25,545,597</b>		<b>42,953,285</b>			<b>1,605,770</b>	<b>2.46</b>
281.00 Meters	10,054,175	2,532,769	10	6,515,989	37-R3	23.9	272,665	2.71
282.00 Meter Installations	6,711,388	1,507,850	0	5,203,538	37-R3	24.5	212,264	3.16
283.00 House Regulators	3,057,627	529,238	10	2,222,626	44-R1.5	25.3	87,818	2.87
284.00 House Regulator Installations	2,247,320	480,981	0	1,766,339	44-R1.5	26.0	67,817	3.02
285.00 Industrial M&R Station Equip.	427,495	224,777	(10)	245,467	32-R2	17.8	13,786	3.22
285.10 Industrial M&R Station Equip. - Comm.	41,727	25,440	(10)	20,460	32-R2	19.0	1,078	2.58
287.00 Other Equip.	86,637	32,981	0	53,656	12-L2.5	5.8	9,331	10.77
287.10 Other Equip. - Street Lighting	30,411	7,778	0	22,633	30-S2.5	19.9	1,135	3.73
<b>Total Distribution Plant</b>	<b>243,907,958</b>	<b>78,572,467</b>		<b>175,275,458</b>		<b>31.9</b>	<b>5,487,688</b>	<b>2.25</b>
<b>General Plant</b>								
291.00 Office Furniture & Equipment	35,343	18,391	0	16,952	20-SQ	8.7	1,938	5.48
292.00 Autos and Trucks	37,758	38,535	5	(2,665)	9-R3	-	-	-
292.10 Trailers	96,158	69,224	5	22,126	10-R2	5.0	4,414	4.59
294.00 Tools, Shop and Garage Equipment	1,699,499	669,604	0	1,029,895	25-SQ	15.1	68,092	4.01
296.00 Power Operated Equip.	47,221	47,221	0	(0)	11-R2.5	-	-	-
298.00 Miscellaneous Equipment	18,430	18,430	0	0	20-SQ	-	-	-
<b>Total General Plant</b>	<b>1,934,409</b>	<b>861,405</b>		<b>1,066,308</b>		<b>14.3</b>	<b>74,444</b>	<b>3.85</b>
<b>Total Depreciable Plant</b>	<b>259,992,930</b>	<b>86,366,447</b>		<b>183,090,661</b>			<b>5,858,512</b>	
<b>Company Proposal</b>							<b>7,742,315</b>	
<b>Difference</b>							<b>(1,883,803)</b>	

**Sources:**

Study, pages III-4 and III-5.

1/ Used Spanos accrual (hard coded number) for accounts with no life or net salvage change.

2/ Snavely King recommended ASL/Curve and RL change.

3/ Snavely King recommended net salvage change.

**Union Light, Heat and Power Company  
Snavely King Recommendations Depreciation Rates Separated into Capital Recovery and COR Rates  
As of September 30, 2004**

Acct #	Account Description (1)	GROSS PLANT Sep 30, 2004 (2)		Capital Recovery /2		Cost of Removal /3		Combined /4	
		Company 1/ (3)	Company 1/ (4)	RL Rate (5) %	RL Accrual (6) \$	RL Rate (7) %	RL Accrual (8) \$	RL Rate (3)+(5) (4)+(6) %	RL Accrual (4)+(6) \$
190.00	<b>Common Plant</b>								
	Structures & Improvements		172,944	2.17		0.01	536	2.17	173,480
	Florence Service Building	4,725,458						0.00	
	Covington Office Building (Sold)	1,548,747						0.00	
	Kentucky Services Building	1,694,442						0.00	
	Minor Structures	7,832						0.00	
	<b>Total Structures &amp; Improvements</b>	<b>7,976,479</b>	<b>172,944</b>	<b>2.17</b>		<b>0.01</b>	<b>536</b>	<b>2.17</b>	<b>173,480</b>
191.00	Office Furniture & Equipment	705,033	45,474	6.45		0.00	0	6.45	45,474
191.10	Office Furniture & Equipment - EDP Equip.	12,981	0	0.00		0.00	0	0.00	0
192.00	Autos and Trucks	5,078	0	0.00		0.00	0	0.00	0
193.00	Stores and Equipment	5,563	2,631	47.29		0.00	0	47.29	2,631
194.00	Tools, Shop and Garage Equipment	169,528	8,129	4.80		0.00	0	4.80	8,129
197.00	Communication Equipment	62,935	4,530	7.20		0.03	20	7.23	4,550
198.00	Miscellaneous Equipment	14,910	308	2.06		0.00	0	2.06	308
	<b>Total Common Plant</b>	<b>8,952,508</b>	<b>234,015</b>	<b>2.61</b>		<b>0.01</b>	<b>557</b>	<b>2.62</b>	<b>234,572</b>
204.10	<b>Production Plant</b>								
	Rights of Way	24,439	0	0.00		0.00	0	0.00	0
205.00	Structures & Improvements	1,554,581	6,854	0.44		-0.07	(1,084)	0.37	5,770
211.00	Liquid Petroleum Gas Equipment	3,619,035	53,629	1.48		0.06	2,177	1.54	55,806
	<b>Total Production Plant</b>	<b>5,198,055</b>	<b>60,484</b>	<b>1.16</b>		<b>0.02</b>	<b>1,093</b>	<b>1.18</b>	<b>61,576</b>
274.10	<b>Distribution Plant</b>								
	Rights of Way - General	1,020,156	8,198	0.80		0.00	0	0.80	8,198
275.00	Structures & Improvements - General	157,012	1,596	1.02		0.10	158	1.12	1,754
276.10	Mains								
	Cast Iron, Copper and All Valves	2,535,274	116,589	4.60		-3.49	(88,444)	1.11	28,145
276.20	Steel	85,376,092	1,826,951	2.14		-0.07	(58,920)	2.07	1,768,031
276.30	Plastic	63,062,653	1,294,226	2.05		0.05	30,237	2.10	1,324,463
	<b>Total Mains</b>	<b>150,974,019</b>	<b>3,237,766</b>	<b>2.14</b>		<b>-0.08</b>	<b>(117,127)</b>	<b>2.07</b>	<b>3,120,639</b>
278.00	M&R - General - System - Excl. Elect. Equip.	2,711,732	52,237	1.93		0.15	4,167	2.08	56,404



**Union Light, Heat and Power Company**  
**Estimated Rates and Accruals**  
**Snavelly King Recommendations Parameters Capital Recovery**  
**As of September 30, 2004**

Account	(1)	(2) 1/	(3)	(4)	(5) 2/	(6)	(7) = (2) + (2)*(6) - (5)	(8) = (9)/(2)	(9) = (7)/(4)
		Original Cost	Survivor Curve	Rem. Life	Book Reserve LESS COR	Positive Net Salvage	Future Accruals	Cap. Rec. Accrual Rate	Annual Accrual Amount
<b>Common Plant</b>									
190.00 Structures & Improvements									
Florence Service Building		4,725,458	100-R1.5	32.7					
Covington Office Building (Sold)		1,548,747	100-R1.5	-		47	(727,911)		
Kentucky Services Building		1,694,442	100-R1.5	7.6					
Minor Structures		7,832	40-R3	31.9					
Total Structures & Improvements		<u>7,976,479</u>		<u>23.0</u>	<u>3,270,867</u>		<u>3,977,701</u>	<u>2.17</u>	<u>172,944</u>
191.00 Office Furniture & Equipment		705,033	20-SQ	5.5	454,928		250,105	6.45	45,474
191.10 Office Furniture & Equipment - EDP Equip.		12,981	5-SQ	-	12,981		0	-	-
192.00 Autos and Trucks		5,078	9-R3	-	5,078	5	(254)	-	-
193.00 Stores and Equipment		5,563	20-SQ	9.8	(20,219)		25,782	47.29	2,631
194.00 Tools, Shop and Garage Equipment		169,528	25-SQ	9.7	90,673		78,855	4.80	8,129
197.00 Communication Equipment		62,935	15-SQ	10.7	14,466		48,469	7.20	4,530
198.00 Miscellaneous Equipment		14,910	20-SQ	3.8	13,740		1,170	2.06	308
<b>Total Common Plant</b>		<b>8,952,508</b>			<b>3,842,515</b>		<b>4,381,828</b>	<b>2.61</b>	<b>234,015</b>
<b>Production Plant</b>									
204.10 Rights of Way		24,439	50-SQ	-	24,439		(0)	-	-
205.00 Structures & Improvements		1,554,581	83-R4	44.4	1,250,244		304,337	0.44	6,854
211.00 Liquid Petroleum Gas Equipment		3,619,035	59-S1.5	37.6	1,602,571		2,016,464	1.48	53,629
<b>Total Production Plant</b>		<b>5,198,055</b>			<b>2,877,254</b>		<b>2,320,801</b>	<b>1.16</b>	<b>60,484</b>
<b>Distribution Plant</b>									
274.10 Rights of Way - General		1,020,156	100-R4	70.4	442,998		577,158	0.80	8,198
275.00 Structures & Improvements - General		157,012	50-R2.5	30.1	108,982		48,030	1.02	1,596
<b>Mains</b>									
276.10 Cast Iron, Copper and All Valves		2,535,274	6 RL	6.0	1,835,739		699,535	4.60	116,589
276.20 Steel		85,376,092	53-R2	31.0	28,740,607		56,635,486	2.14	1,826,951
276.30 Plastic		63,062,653	70-R1.5	44.3	5,728,460		57,334,193	2.05	1,294,226
<b>Total Mains</b>		<b>150,974,019</b>			<b>36,304,805</b>		<b>114,669,214</b>	<b>2.14</b>	<b>3,237,766</b>
278.00 M&R - General - System - Excl. Elect. Equip.		2,711,732	40-R1	23.7	1,473,708		1,238,024	1.93	52,237
278.10 M&R - General - System - Elect. Equip.		389,078	15-S2.5	10.0	332,682		56,396	1.45	5,640

**Union Light, Heat and Power Company**  
**Estimated Rates and Accruals**  
**Snavely King Recommendations Parameters Capital Recovery**  
**As of September 30, 2004**

Account	(1)	(2) 1/	(3)	(4)	(5) 2/	(6)	(7) = (2) + (2)*(6) - (5)	(8) = (9)/(2)	(9) = (7)/(4)
		Original Cost	Survivor Curve	Rem. Life	Book Reserve LESS COR	Positive Net Salvage	Future Accruals	Cap. Rec. Accrual Rate	Annual Accrual Amount
278.20 Measuring & Regulating - General - District		635,340	50-R2	25.4	332,346		302,994	1.88	11,929
Services									
280.10 Cast Iron, Copper and Valves		2,663,011	6 RL	6.0	2,462,117		200,894	1.26	33,482
280.20 Steel		3,241,998	38-R1	22.1	1,866,074		1,375,924	1.92	62,259
280.30 Plastic		59,458,831	42-R1.5	25.6	15,740,384		43,718,448	2.87	1,707,752
Total Services		65,363,841			20,068,575		45,295,265	2.76	1,803,493
281.00 Meters		10,054,175	37-R3	23.9	2,489,827	10	6,558,930	2.73	274,432
282.00 Meter Installations		6,711,388	37-R3	24.5	1,507,499	10	5,203,889	3.16	212,404
283.00 House Regulators		3,057,627	44-R1.5	25.3	513,292	10	2,238,572	2.89	88,481
284.00 House Regulator Installations		2,247,320	44-R1.5	26.0	476,852		1,770,468	3.03	68,095
285.00 Industrial M&R Station Equip. - Comm.		427,495	32-R2	17.8	208,958		218,537	2.87	12,277
285.10 Industrial M&R Station Equip. - Comm.		41,727	32-R2	19.0	22,614		19,113	2.41	1,006
287.00 Other Equip.		86,637	12-L2.5	5.8	32,981		53,656	10.68	9,251
287.10 Other Equip. - Street Lighting		30,411	30-S2.5	19.9	7,778		22,633	3.74	1,137
<b>Total Distribution Plant</b>		<b>243,907,958</b>			<b>64,323,897</b>		<b>178,272,881</b>	<b>2.37</b>	<b>5,787,942</b>
<b>General Plant</b>									
291.00 Office Furniture & Equipment		35,343	20-SQ	8.7	18,391		16,952	5.51	1,948
292.00 Autos and Trucks		37,758	9-R3	-	38,535	5	(2,665)	-	-
292.10 Trailers		96,158	10-R2	5.0	69,224	5	22,126	4.60	4,425
294.00 Tools, Shop and Garage Equipment		1,699,499	25-SQ	15.1	669,604		1,029,895	4.01	68,205
296.00 Power Operated Equip.		47,221	11-R2.5	-	47,221		(0)	-	-
298.00 Miscellaneous Equipment		18,430	20-SQ	-	18,430		0	-	-
<b>Total General Plant</b>		<b>1,934,409</b>			<b>861,405</b>		<b>1,066,308</b>	<b>3.86</b>	<b>74,579</b>
<b>Total Depreciable Plant</b>		<b>259,992,930</b>			<b>71,905,070</b>		<b>186,041,818</b>	<b>2.37</b>	<b>6,157,020</b>

**Sources:**  
1/ Study, pages III-4 and III-5. Slight differences due to rounding and calculation differences.  
2/ See SK calculation -- Removal of COR from Book Reserve

**Union Light, Heat and Power Company**  
**Estimated Rates and Accruals**  
**Snavely King Recommendations Parameters Cost of Removal**  
**As of September 30, 2004**

Account	(1)	(2) 1/	(3) 1/	(4) 1/	(5) 1/	(6)=(2)*(5)	(7) 2/	(8)=(5)-(4)	(9)=(10)/(2)	(10)=(6)/(8)
		Original Cost (\$)	Survivor Curve	Rem. Life	Spanos COR (%)	Inflated Future COR (\$)	COR in Reserve (\$)	Future Accruals (\$)	Accrual Rate	Annual Accrual Amount (\$)
<b>Common Plant</b>										
190.00	Structures & Improvements									
	Florence Service Building	4,725,458	100-R1.5	32.7						
	Covington Office Building (Sold)	1,548,747	100-R1.5	-						
	Kentucky Services Building	1,694,442	100-R1.5	7.6						
	Minor Structures	7,832	40-R3	31.9	(5)	392				
	Total Structures & Improvements	7,976,479		23.0		392	(11,946)	12,338	0.01	536
191.00	Office Furniture & Equipment	705,033	20-SQ	5.5						
191.10	Office Furniture & Equipment - EDP Equip.	12,981	5-SQ	-						
192.00	Autos and Trucks	5,078	9-R3	-						
193.00	Stores and Equipment	5,563	20-SQ	9.8						
194.00	Tools, Shop and Garage Equipment	169,528	25-SQ	9.7						
197.00	Communication Equipment	62,935	15-SQ	10.7			(216)	216	0.03	20
198.00	Miscellaneous Equipment	14,910	20-SQ	3.8						
	<b>Total Common Plant</b>	<b>8,952,508</b>				<b>392</b>	<b>(12,163)</b>	<b>12,555</b>	<b>0.01</b>	<b>557</b>
<b>Production Plant</b>										
204.10	Rights of Way	24,439	50-SQ	-						
205.00	Structures & Improvements	1,554,581	83-R4	44.4	(5)	77,729	125,866	(48,137)	-0.07	(1,084)
211.00	Liquid Petroleum Gas Equipment	3,619,035	59-S1.5	37.6	(5)	180,952	99,103	81,849	0.06	2,177
	<b>Total Production Plant</b>	<b>5,198,055</b>				<b>258,681</b>	<b>224,969</b>	<b>33,712</b>	<b>0.02</b>	<b>1,093</b>
<b>Distribution Plant</b>										
274.10	Rights of Way - General	1,020,156	100-R4	70.4						
275.00	Structures & Improvements - General	157,012	50-R2.5	30.1	(10)	15,701	10,950	4,751	0.10	158
	<b>Total Distribution Plant</b>	<b>1,177,168</b>				<b>15,701</b>	<b>10,950</b>	<b>4,751</b>	<b>0.10</b>	<b>158</b>
<b>Mains</b>										
276.10	Cast Iron, Copper and All Valves	2,535,274	6 RL	6.0			530,665	(530,665)	-3.49	(88,444)
276.20	Steel	85,376,092	53-R2	31.0	(5)	4,268,805	6,095,322	(1,826,518)	-0.07	(88,920)
276.30	Plastic	63,062,653	70-R1.5	44.3	(5)	3,153,133	1,813,637	1,339,496	0.05	30,237
	<b>Total Mains</b>	<b>150,974,019</b>				<b>7,421,937</b>	<b>8,439,625</b>	<b>(1,017,687)</b>	<b>-0.08</b>	<b>(117,127)</b>
278.00	M&R - General - System - Excl. Elect. Equip.	2,711,732	40-R1	23.7	(5)	135,587	36,827	98,760	0.15	4,167

**Union Light, Heat and Power Company**  
**Estimated Rates and Accruals**  
**Snavely King Recommendations Parameters Cost of Removal**  
**As of September 30, 2004**

Account	Original Cost (\$)	Survivor Curve	Rem. Life	Spanos COR (%)	Inflated Future COR (\$)	COR in Reserve (\$)	Future Accruals (\$)	COR Accrual Rate	Annual Accrual Amount (\$)
	(2) 1/	(3) 1/	(4) 1/	(5) 1/	(6)=(2)*(-5)	(7) 2/	(8)=(5)-(4)	(9)= (10)/(2)	(10)=(6)/(8)
278.10 M&R - General - System - Elect. Equip.	389,078	15-S2.5	10.0	(5)	19,454	21,632	(2,178)	-0.06	(218)
278.20 Measuring & Regulating - General - District	635,340	50-R2	25.4	(75)	476,505	180,501	296,004	1.83	11,654
<b>Services</b>									
280.10 Cast Iron, Copper and Valves	2,663,011	6 RL	6.0		-	812,683	(812,683)	-5.09	(135,447)
280.20 Steel	3,241,998	38-R1	22.1	(5)	162,100	572,322	(410,222)	-0.57	(18,562)
280.30 Plastic	59,458,831	42-R1.5	25.6	(5)	2,972,942	4,092,017	(1,119,076)	-0.07	(43,714)
<b>Total Services</b>	<b>65,363,841</b>				<b>3,135,041</b>	<b>5,477,022</b>	<b>(2,341,980)</b>	<b>-0.30</b>	<b>(197,723)</b>
281.00 Meters	10,054,175	37-R3	23.9		-	42,942	(42,942)	-0.02	(1,797)
282.00 Meter Installations	6,711,388	37-R3	24.5		-	351	(351)	0.00	(14)
283.00 House Regulators	3,057,627	44-R1.5	25.3		-	15,946	(15,946)	-0.02	(630)
284.00 House Regulator Installations	2,247,320	44-R1.5	26.0		-	4,129	(4,129)	-0.01	(159)
285.00 Industrial M&R Station Equip.	427,495	32-R2	17.8	(10)	42,749	15,819	26,930	0.35	1,513
285.10 Industrial M&R Station Equip. - Comm.	41,727	32-R2	19.0	(10)	4,173	2,826	1,347	0.17	71
287.00 Other Equip.	86,637	12-L2.5	5.8		-	-	-	0.00	-
287.10 Other Equip. - Street Lighting	30,411	30-S2.5	19.9		-	-	-	0.00	-
<b>Total Distribution Plant</b>	<b>243,907,958</b>				<b>11,251,148</b>	<b>14,248,570</b>	<b>(2,997,422)</b>	<b>-0.12</b>	<b>(300,106)</b>
<b>General Plant</b>									
291.00 Office Furniture & Equipment	35,343	20-SQ	8.7		-	-	-	0.00	-
292.00 Autos and Trucks	37,758	9-R3	-		-	-	-	0.00	-
292.10 Trailers	96,158	10-R2	5.0		-	-	-	0.00	-
294.00 Tools, Shop and Garage Equipment	1,699,499	25-SQ	15.1		-	-	-	0.00	-
296.00 Power Operated Equip.	47,221	11-R2.5	-		-	-	-	0.00	-
298.00 Miscellaneous Equipment	18,430	20-SQ	-		-	-	-	0.00	-
<b>Total General Plant</b>	<b>1,934,409</b>				<b>-</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>-</b>
<b>Total Depreciable Plant</b>	<b>259,992,930</b>				<b>11,510,220</b>	<b>14,461,377</b>	<b>(2,951,156)</b>	<b>-0.11</b>	<b>(298,457)</b>

**Sources:**  
Study, pages III-4 and III-5. Slight differences due to rounding and calculation differences.  
1/ See SK calculation -- Removal of COR from Book Reserve

**Union Light, Heat and Power Company  
Removal of COR from Book Reserve  
As of September 30, 2004**

Account (1)	Original Cost (2)	Book Reserve (3)	COR in Reserve (4)	Book Reserve Less COR (5)=(3)-(4)
<b>Common Plant</b>				
190.00 Structures & Improvements				
Florence Service Building	4,725,458	1,256,998		
Covington Office Building (Sold)	1,548,747	820,835		
Kentucky Services Building	1,694,442	1,180,267		
Minor Structures	7,832	821		
<b>Total Structures &amp; Improvements</b>	<b>7,976,479</b>	<b>3,258,921</b>	<b>(11,946)</b>	<b>3,270,867</b>
191.00 Office Furniture & Equipment	705,033	454,928	-	454,928
191.10 Office Furniture & Equipment - EDP Equip.	12,981	12,981	-	12,981
192.00 Autos and Trucks	5,078	5,078	-	5,078
193.00 Stores and Equipment	5,563	(20,219)	-	(20,219)
194.00 Tools, Shop and Garage Equipment	169,528	90,673	-	90,673
197.00 Communication Equipment	62,935	14,250	(216)	14,466
198.00 Miscellaneous Equipment	14,910	13,740	-	13,740
<b>Total Common Plant</b>	<b>8,952,508</b>	<b>3,830,352</b>	<b>(12,163)</b>	<b>3,842,515</b>
<b>Production Plant</b>				
204.10 Rights of Way	24,439	24,439	-	24,439
205.00 Structures & Improvements	1,554,581	1,376,110	125,866	1,250,244
211.00 Liquid Petroleum Gas Equipment	3,619,035	1,701,674	99,103	1,602,571
<b>Total Production Plant</b>	<b>5,198,055</b>	<b>3,102,223</b>	<b>224,969</b>	<b>2,877,254</b>
<b>Distribution Plant</b>				
274.10 Rights of Way - General	1,020,156	442,998	-	442,998
275.00 Structures & Improvements - General	157,012	119,932	10,950	108,982
<b>Mains</b>				
276.10 Cast Iron, Copper and All Valves	2,535,274	2,366,404	530,665	1,835,739
276.20 Steel	85,376,092	34,835,929	6,095,322 1/	28,740,607
276.30 Plastic	63,062,653	7,542,097	1,813,637 2/	5,728,460
<b>Total Mains</b>	<b>150,974,019</b>	<b>44,744,430</b>	<b>8,439,625</b>	<b>36,304,805</b>
278.00 M&R - General - System - Excl. Elect. Equip.	2,711,732	1,510,535	36,827	1,473,708
278.10 M&R - General - System - Elect. Equip.	389,078	354,314	21,632	332,682
278.20 Measuring & Regulating - General - District	635,340	512,847	180,501	332,346
<b>Services</b>				
280.10 Cast Iron, Copper and Valves	2,663,011	3,274,800	812,683	2,462,117
280.20 Steel	3,241,998	2,438,396	572,322 3/	1,866,074
280.30 Plastic	59,458,831	19,832,401	4,092,017 4/	15,740,384
<b>Total Services</b>	<b>65,363,841</b>	<b>25,545,597</b>	<b>5,477,022</b>	<b>20,068,575</b>
281.00 Meters	10,054,175	2,532,769	42,942 5/	2,489,827
282.00 Meter Installations	6,711,388	1,507,850	351 6/	1,507,499
283.00 House Regulators	3,057,627	529,238	15,946 7/	513,292
284.00 House Regulator Installations	2,247,320	480,981	4,129 8/	476,852
285.00 Industrial M&R Station Equip.	427,495	224,777	15,819	208,958
285.10 Industrial M&R Station Equip. - Comm.	41,727	25,440	2,826	22,614
287.00 Other Equip.	86,637	32,981	-	32,981
287.10 Other Equip. - Street Lighting	30,411	7,778	-	7,778
<b>Total Distribution Plant</b>	<b>243,907,958</b>	<b>78,572,467</b>	<b>14,248,570</b>	<b>64,323,897</b>

**Union Light, Heat and Power Company  
Removal of COR from Book Reserve  
As of September 30, 2004**

Account (1)	Original Cost (2)	Book Reserve (3)	COR in Reserve (4)	Book Reserve Less COR (5)=(3)-(4)
<b>General Plant</b>				
291.00 Office Furniture & Equipment	35,343	18,391	-	18,391
292.00 Autos and Trucks	37,758	38,535	-	38,535
292.10 Trailers	96,158	69,224	-	69,224
294.00 Tools, Shop and Garage Equipment	1,699,499	669,604	-	669,604
296.00 Power Operated Equip.	47,221	47,221	-	47,221
298.00 Miscellaneous Equipment	18,430	18,430	-	18,430
<b>Total General Plant</b>	<b>1,934,409</b>	<b>861,405</b>	<b>-</b>	<b>861,405</b>
<b>Total Depreciable Plant</b>	<b>259,992,930</b>	<b>86,366,447</b>	<b>14,461,377</b>	<b>71,905,070</b>

**Sources:**

Cols. (2) and (3) - Study, pages III-4 and III-5.

Col. (4) - Response to AG-DR-01-076, Attachment pages 1 and 2, "Ending Reserve" column. Column (4) amounts as of 12/31/04.

- 1/ Includes COR for accounts 276.2 (Gas Main Dist Line Steel), 276.5 (Gas Main Feed Line Steel and 276.7 (Capex Gas Main Steel)
- 2/ Includes COR for accounts 276.3 (Gas Main Dist. Plastic) and 276.8 (Capex Gas Mains Plastic)
- 3/ Includes COR for accounts 280.2 (Gas Services Steel) and 280.4 (Capex Services M-C Steel)
- 4/ Includes COR for accounts 280.3 (Gas Services Plastic), 280.5 (Services M-C Plastic), 280.6 (Services C-M Plastic) and 280.7 (Capex Services C-M Plastic)
- 5/ Includes COR for accounts 281.0 (Gas Meters) and 281.1 (Leased Gas Meters)
- 6/ Includes COR for accounts 282.0 (Gas Meter Installations) and 282.1 (Leased Gas Meter Installations)
- 7/ Includes COR for accounts 283.0 (Gas House Regulators) and 283.1 (Gas House Regs. Leased)
- 8/ Includes COR for accounts 284.0 (Gas House Regulator Installations) and 284.1 (Gas House Reg. Install. Leased)

**ULH&Ps Traditional Inflated Future Cost Approach**  
**"TIFCA"**

ULH&P's non-legal ARO request exceeds its actual annual cost of removal to a large degree because ULH&P uses a Traditional Inflated Future Cost Approach ("TIFCA") to make its future non-legal ARO estimates. This has resulted in a large regulatory liability to ratepayers because ULH&P has bundled inflated cost of removal factors in most of its depreciation rates, and then applied those rates for years to an ever-expanding depreciable plant base. The accruals resulting from this approach vastly exceed, year-by-year, the money that ULH&P actually spends or even allocates for cost of removal.

ULH&P's TIFCA result in inflated cost of removal factors because ULH&P's TIFCA net salvage studies relate removal costs in current dollars to retirements of assets whose cost reflects very old historical dollars. The result is that due to inflation which has been experienced, the current removal cost is many multiples of the historical original cost dollars of the retired asset.

**Hypothetical TIFCA Example**

Below is a hypothetical example of Mr. Spanos' TIFCA studies in this case. These are the same types of studies that ULH&P and other utilities, including the telephone industry, have used in the past. The TIFCA studies are summaries of annual retirements and net salvage, which are used as a basis for future net salvage proposals. The following table is a hypothetical example of Mr. Spanos' TIFCA net salvage studies.

**Hypothetical TIFCA Net Salvage Study**

<b><u>Add Year</u></b> (a)	<b><u>Ret. Year</u></b> (b)	<b><u>Original Cost</u></b> (c)	<b><u>(\$)</u></b> (d)	<b><u>Cost of Removal</u></b> (e)=(d)/(c)
1947	1997	1,000	(500)	(50)%
1948	1998	2,000	(1,500)	(75)
1949	1999	2,500	(1,000)	(40)
1950	2000	3,000	(2,500)	(83)
1951	2001	<u>4,000</u>	<u>(5,000)</u>	<u>(125)</u>
	<b>Total</b>	12,500	(10,500)	(84)%
	<b>3-Year Avg.</b>	3,167	(2,833)	(89)%
	<b>5-Year Avg.</b>	2,500	(2,100)	(84)%

The years in column (a) are the years in which the assets in column (c) were added to plant. The years in column (b) are the years these assets were retired from service. They were added to plant in service several years ago, they lived their service life, and then they were retired or withdrawn from service. The cost of removal amounts in column (d) are the retirement costs incurred in the retirement year. For example, an asset purchased for \$4,000 in 1951 was retired from service in 2001, but it cost \$5,000 to dispose of the 1951 asset. The ratios in column (e) are the cost of removal amount expressed as a percentage of the original cost of the assets; that is:

$$\text{\$5,000 removal cost} / \text{\$4,000 original cost} = 125 \text{ percent.}$$

Mr. Spanos used figures from several bands of data to estimate his future net salvage ratios. The hypothetical TIFCA uses a 3-year and a 5-year band to demonstrate Mr. Spano's application of TIFCA. Mr. Spanos' net salvage approach results in an increase to depreciation rates because he primarily

recommends negative net salvage ratios, and as demonstrated in the concepts exhibit, any negative net salvage ratio will increase a depreciation rate. TIFCA net salvage ratios as developed by Mr. Spanos will increase the rates even further.

As shown above, TIFCA net salvage ratios depend on the relationship of the current cost of removal as a percentage of the original cost of the assets retired, as shown above. The timing mismatch within this relationship results in an inflated negative net salvage ratio which is then bundled into the depreciation rate calculation.

This happens because The retirements are in very old original cost dollars versus retirement costs in current dollars. There is a fundamental mismatch in the value of dollars between the years the assets were installed and the years they are retired.

As an additional example, assume that the \$4,000 of assets retired in 2001 were actually placed in service in 1951 or 50 years earlier. The cost of removal in 2001 dollars is \$5,000, or 125 percent, of the 1951 addition. The result is negative 125 percent because it fails to take into account the fact that the \$5,000 cost of removal has experienced 50 years of inflation relative to what it would have been in 1951.

If we assume the inflation rate has been 5 percent annually, the cost of removal in 50-year old dollars is only \$436 or 11 percent of the original \$4,000 installation. Mr. Spanos' approach, however, shows 125 percent as a result of this timing mismatch. The same disparity would be true for all other years in the

example. There is a fundamental mismatch between the dollars associated with the installation dates of the assets and the dates they are removed from service.

Mr. Spanos would use a negative 125 percent ratio in the current depreciation rate calculation. This approach is equivalent to capitalizing 125 percent of the existing plant in service. In fact Mr. Spanos has in some cases used negative net salvage ratios that far exceed 125 percent.

The example above addresses only retirements. But at the same time, the actual plant balance has been growing for many reasons. The hypothetical company has been making additions every year due to growth, and these additions have also experienced inflation. Assume the current total plant balance in this account is \$100,000,000. Mr. Spanos would calculate depreciation rates designed to collect \$225,000,000 from ratepayers, i.e. \$125,000,000 more than the company spent on the plant, and this would be based on a \$4,000 retirement.

This mismatch leads to exorbitant current charges to current ratepayers for an inflated future cost of removal. These amounts far exceed the amounts that would be allowed even if ULH&P had legal AROs on which to spend the money, which it does not.

Mr. Spanos' future net salvage ratios are inflated, but not reduced to their fair or net present value. They result in excessive non-legal charges because these inflated net salvage ratios are applied to current plant balances. Thus, current ratepayers pay for inflated removal costs that are not expected to occur.

### **Alternatives to TIFCA**

There are alternatives to TIFCA. The following discussion addresses a "cash basis" alternative, and three "accrual basis" alternatives. There are probably more alternatives.

#### **Alternatives to TIFCA**

- Cash Basis: - Expensing
- Accrual Basis: - Normalized Net Salvage Allowance
- SFAS No. 143 Fair Value Approach
- Net Present Value Approach

All of these have, in one form or another, been adopted by certain other state agencies.

#### **Cash Basis Alternative to TIFCA**

The cash basis alternative removes non-legal removal costs and dismantlement from the depreciation rate process. It would no longer be charged to accumulated depreciation. The cash basis alternative involves capitalization and/or expensing. The allocation, like all allocations, is at least somewhat arbitrary. Thus, one component of the cash basis alternative would be to consider capitalizing the entire cost of replacements to plant in service, rather than allocating a portion to cost of removal. This would have the same effect on rate base as the company's current accounting and would eliminate the problems created by the allocation. It would have the same effect on rate base because the current accounting debits actual cost to accumulated depreciation which increases rate base. If there is not a replacement, under the cash basis

alternative the cost of removal and/or dismantlement would be charged to operating expense.

It is not necessary, under the cash basis alternative, to have a combination of capitalization and expensing. ULH&P could charge all non-legal cost of removal and dismantlement to operating expense. It would be eliminated from depreciation expense and estimated, just as any other operating expense, in a rate case. If there are concerns that ULH&P or its customers could unduly suffer from an over-or under-estimation of this expense, the Kentucky PSC could adopt balancing account treatment for the actual recorded expenses, subject to reasonableness review.

#### **Accrual Basis Alternatives to TIFCA**

There are three accrual basis alternatives to TIFCA: the normalized net salvage allowance approach, the SFAS NO. 143 ARO Fair Value approach, and the net present value approach.

#### **Normalized Net Salvage Allowance Accrual Approach**

The normalized net salvage allowance approach is similar to the cash basis approach except that the annual average net salvage, which includes cost of removal, is included as a specifically identifiable amount within the annual depreciation accrual. In other words, a normalized net salvage amount is still a component of the depreciation expense accrual and is credited to accumulated depreciation and actual cost of removal continues to be charged to accumulated depreciation.

The annual net salvage accrual could be either a fixed amount or a rolling five-year average amount that would be included in the annual depreciation accrual and actual net salvage would continue to be charged to accumulated depreciation.

**SFAS NO. 143 Fair Value Accrual Approach**

The SFAS No. 143 Fair Value Approach treats ULH&P's non-legal AROs as if they were legal AROs.

**Net Present Value Accrual Approach**

The net present value approach is much less complicated than the SFAS No. 143 fair value approach. The net present value approach merely discounts ULH&P's future cost of removal estimates back to 2003 values using the inflation factor that ULH&P used for its ARO calculations. In my opinion this may resolve the concerns regarding future inflation expressed by the KPSC in Case No. 2003-00434.

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-070**

**REQUEST:**

70. Please provide complete copies of all correspondence with the following parties regarding the Company's implementation of FASB Statement No. 143 the FERC NOPR and Order 631 in RM02-7-000:
- a. External auditors and other public accounting firms,
  - b. Consultants,
  - c. External counsel,
  - d. Federal and State regulatory agencies, and
  - e. Internal Revenue Service.

**RESPONSE:**

See Attachment KyAG-DR-01-070. ULH&P had no correspondence with the Internal Revenue Service regarding the items referenced above.

**WITNESS RESPONSIBLE:**

a through d -- Peggy J. Laub  
e -- Alexander J. Torok

**Laub, Peggy**

---

**From:** Ritchie, Brett  
**Sent:** Thursday, April 01, 2004 8:38 AM  
**To:** Pate, Gwen; Howe, Lee  
**Cc:** Lawler, Sarah  
**Subject:** FW: FERC Form 1 classification of non-143 cost of removal costs

**Attachments:** Form 1 Classification of non- FAS 143 accumulated cost of removal.doc; RE: Form 1 Classification of non- FAS 143 accumulated cost of removal



Form 1 Classification of non-  
Classification of n...

RE: Form 1

See attached, I also included the Cinergy response.

-----Original Message-----

**From:** David Stringfellow [mailto:DStringfellow@eei.org]  
**Sent:** Wednesday, March 31, 2004 5:14 PM  
**To:** Accounting Standards Committee  
**Subject:** FERC Form 1 classification of non-143 cost of removal costs

**TO:** EEI Accounting Standards Committee Members

Attached is the summary of the Committee survey on the FERC Form 1 classification of non-Statement 143 cost of removal costs. I sent this summary to Jim Guest at the FERC.

David Stringfellow  
Edison Electric Institute

**Tracking:**

**Recipient**  
Pate, Gwen  
Howe, Lee  
Lawler, Sarah

**Read**  
Read: 4/1/2004 2:50 PM  
Read: 4/1/2004 8:40 AM

3/24/04

TO: EEI Accounting Standards Committee Members

As everyone is likely very aware, the SEC staff has definitively said that for its filings (Form 10K and 10Q) the non-Statement 143 accumulated cost of removal for operations that continue to be subject to the provisions of Statement 71 should be broken out from accumulated depreciation and reclassified as a regulatory liability on the balance sheet.

What is still uncertain is whether this same format should be used for the FERC Form 1 for 2003. The FERC staff has not issued any definitive guidance on whether the SEC preference should be followed for the FERC Form 1 balance sheet.

I have informally spoken with Jim Guest at the FERC. He asked if I could receive some feedback on how companies would prefer to report this non-143 accumulated cost of removal - leave it in Account 108 or reclassify it as a regulatory liability for the FERC Form 1 balance sheet.

I can pass on your comments on a summary basis (no company names used) back to Jim Guest at the FERC. This would help the FERC in issuing some guidance on this issue.

Thank you.

David Stringfellow  
Edison Electric Institute

Twenty-one responses (some respondents are at the holding company level representing several operating companies) support leaving the accumulated cost of removal in Account 108.

Among the comments received –

The Commission in Order 631 specifically chose not to require reclassification.

I believe that non-ARO accumulated cost of removal should continue to be classified in account 108 for regulatory accounting and reporting purposes. Reclassifying such amounts as a regulatory liability in the FERC Form 1 may have unintended consequences with various state commissions that follow the FERC U.S. of A. Do we want each state commission independently debating whether non-ARO accumulated cost of removal is really a regulatory liability and coming to different conclusions? Nothing has changed from the industry's historical regulatory accounting and reporting model except that someone at the SEC has successfully used SFAS 143 as an opportunity to force a pet agenda item upon the industry without bothering to follow a due process that includes public comment. Let sleeping dogs lie. For your background, [my company] is planning to report non-ARO accumulated cost of removal in account 108 in our FERC Form 1. We are including a footnote on page 123 of the FERC Form 1 that explains the difference between how non-ARO accumulated cost of removal is treated in the FERC report versus in our 10-K.

For reporting this item in our FERC Form 1, [my company] prefers to keep the accumulated cost of removal in Account 108. We believe moving this to a regulatory liability will create difficulties in rate cases before the state commissions, and may be a catalyst to consumer advocates suggesting rapid refunds to customers.

[My company] would prefer to leave it in account 108 for Form 1 purposes -- one of our operating company rate plans is based on a return on asset formula and moving these amounts would trigger a rate change unless otherwise excluded.

We believe the FERC has already addressed the issue. Our understanding is that the FERC Order 631, Par. 36 still requires "removal costs that are not asset retirement obligations are included as a component of the depreciation expense and recorded in accumulated depreciation". It would seem to me that the FERC would need to go through a formal rulemaking process to change this (but then the SEC didn't go through a rulemaking process to redefine GAAP either). There have been various times in the past where SEC disclosure and FERC reporting have been different, such differences have been handled in other disclosures in the Form 1.

We're not even sure why companies are asking this question based on paragraphs 37 & 38 of FERC's order on acctg. for AROs. Para. 37 says that non-legal retire. obligations, such as cost of removal, aren't in the scope of FERC's rule. Para. 38 instead requires companies to maintain subsidiary records for cost of removal for non-legal retire. obli. recorded in accum. depr. Based on FERC's rule, Acct. 108 is where COR should remain for FERC reporting so in our mind, FERC has already told us what to do.

We would say a reclassification with regards to FERC reporting is not necessary:

- 1) COR is included in our depreciation rates as approved by the states.
- 2) COR as presented in the SEC documents is based on a theoretical amount of COR included in accumulated depreciation.
- 3) Most (all?) companies do not and will not have systems in place to capture this information through their existing fixed plant systems.
- 4) If COR is reclassified, then should COR as it is incurred be re-pointed against the liability account?

We think FERC should NOT change the current requirements regarding accounting and reporting for cost of removal. Property taxes in some jurisdictions are calculated under the cost approach based on net plant values. Some taxing authorities use FERC forms to calculate the taxable base. If FERC requires non-aro removal costs to be recorded as a regulatory liability, property taxes could increase for some utilities. Additionally, some regulators could use this as an opportunity to require utilities to refund some or all of the removal amounts to customers even though companies will still continue to incur costs to remove/retire assets.

-----  
Three respondents support breaking out the accumulated cost of removal as a regulatory liability or asset.

Among the comments received --

[C]onform to the SEC presentation. It's one less thing to reconcile between the FERC form and our external financial presentation.

[My] company is planning to show as a regulatory liability for Form 1.

-----  
One respondent favored using Account 108 for 2003, but change for future years -

We have classified the non-ARO COR in a subaccount of Account 108 consistent with FERC's April 2003 accounting ruling. Since our FERC Form 1 is the basis of our state Form 1 (which is due 3/31/04) we are nearing completion of our filing & would not support change at this point for the 12/31/03 filing. However, I do support this change going forward.



**Laub, Peggy**

---

**From:** Ritchie, Brett  
**Sent:** Monday, March 29, 2004 2:20 PM  
**To:** 'David Stringfellow (E-mail)'  
**Subject:** RE: Form 1 Classification of non- FAS 143 accumulated cost of removal

Cinergy would prefer to leave the amount in 108

-----Original Message-----

**From:** David Stringfellow [mailto:DStringfellow@eei.org]  
**Sent:** Wednesday, March 24, 2004 10:23 AM  
**To:** Accounting Standards Committee  
**Subject:** Form 1 Classification of non- FAS 143 accumulated cost of removal

TO: EEI Accounting Standards Committee Members

As everyone is likely very aware, the SEC staff has definitively said that for its filings (Form 10K and 10Q) the non-Statement 143 accumulated cost of removal for operations that continue to be subject to the provisions of Statement 71 should be broken out from accumulated depreciation and reclassified as a regulatory liability on the balance sheet.

What is still uncertain is whether this same format should be used for the FERC Form 1 for 2003. The FERC staff has not issued any definitive guidance on whether the SEC preference should be followed for the FERC Form 1 balance sheet.

I have informally spoken with Jim Guest at the FERC. He asked if I could receive some feedback on how companies would prefer to report this non-143 accumulated cost of removal - leave it in Account 108 or reclassify it as a regulatory liability for the FERC Form 1 balance sheet.

I can pass on your comments on a summary basis (no company names used) back to Jim Guest at the FERC. This would help the FERC in issuing some guidance on this issue.

Thank you.

David Stringfellow  
Edison Electric Institute

---  
You are currently subscribed to asc as: [brett.ritchie@cinergy.com] To unsubscribe, forward this message to leave-asc-32506W@ls.eei.org

**Attorney General First Set Data Requests**  
**ULH&P Case No. 2005-00042**  
**Date Received: April 6, 2005**  
**Response Due Date: April 19, 2005**

**AG-DR-01-075**

**REQUEST:**

75. Please refer to page 60 of the Cinergy Corp. 2003 Annual Report as provided in response to filing requirement 807 KAR 5:001 Section 10 (9)(l).
- a. Please provide the calculation and supporting workpapers for the \$39 million (net of tax) gain related to the cumulative effect of the adoption of SFAS No. 143, as discussed on this page.
  - b. Does any of this amount relate to the assets being transferred from CG&E to ULH&P (East Bend, Woodsdale and Miami Fort Generating stations)? If so, please provide the calculation of the portion of the \$39 million gain that was attributable to the reversal of cost of removal collected for these assets. Please include the before-tax calculation of the amount as well.
  - c. Was the portion of the \$39 million attributable to the reversal of cost of removal removed from accumulated depreciation?
  - d. Please explain in detail the impact that this reversal of collected cost of removal had, or would have had, on the transfer price of these assets.

**RESPONSE:**

- a. See Attachment AG-DR-01-075a.
- b. See Attachment AG-DR-01-075b.
- c. Yes.
- d. Since the amount was removed from accumulated depreciation, the net book value of the plant would increase by the amount of the reversal.

**WITNESS RESPONSIBLE: Peggy A. Laub**

Attorney General First Set Data Request  
ULH&P Case No. 2005-00042  
Attachment AG-DR-01-075a

	Before-tax Amount	Tax	Net of Tax
	\$	\$	\$
	FERC account 435		
	79,862,659.00		
	-6,474,743.59		
	-8,090,112.08		
	-654,281.84		
	-153,680.70		
	-119,293.76		
	3,197.72		
	8,961.16		
	<u>64,382,705.91</u>	<u>25,205,829.00</u>	<u>39,176,876.91</u>
	-180,986.00		
	-86,292.00		
	-45,704.00		
	<u>-312,982.00</u>	<u>-109,544.00</u>	<u>-203,438.00</u>
	64,069,723.91	25,096,285.00	38,973,438.91

**CGE**

CGE Non-Reg - Historical Cost of Removal

-RWIP @12/31/2002

-RWIP @12/31/2002 (Jointly Owned Plants)

East Bend ARO

Zimmer ARO

Miami Fort ARO

Adjust Power plant entries for Jan & Feb deprec

Adjust Power plant entries for Jan & Feb Accretion

Total for CGE

**International Companies**

Corp 420

Corp 426

Corp 427

Total Cinergy Corp

Attorney General First Set Data Request  
ULH&P Case No. 2005-00042  
Attachment AG-DR-01-075b

\$

Woodsdale	
3410	2,116,405.00
3420	1,167,466.00
RWIP	<u>-657,611.94</u>

Total 2,626,259.06

East Bend	
311	1,010,350.00
312	9,973,086.00
314	2,097,036.00
315	681,204.00
316	161,254.00
RWIP	<u>-3,956,266.48</u>

Total 9,966,663.52

Miami Fort 5 & 6 (1)	
311	719,163.00
312	2,481,540.00
314	1,058,837.00
315	299,418.00
316	58,324.00
RWIP	<u>-725,651.07</u>

Total 3,891,630.93

Grand Total (1) 16,484,553.51

Tax 6,453,703.00

Total net of Tax 10,030,850.51

(1) Only Miami Fort Unit 6 is being transferred to ULH&P.  
Further analysis would have to be done to split  
the amount between the two units.